1 UNITED STATES DISTRICT COURT	
EASTERN DISTRICT OF TENNESSEE	
2	
3 ROCKY WATERS MOUNTAIN INN, LLC,	
4 Plaintiff,	
5 v. Docket No. 3:19-CV-6	
6 THE TRAVELERS INDEMNITY	
COMPANY OF AMERICA,	
7	
Defendant.	
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17 VIDEOTAPE DEPOSITION	
18 OF	
19 THOMAS J. IRMITER	
20	
21	
22	
23	
24	
25 Taken February 28, 2020 By Christine M. Clark, F	.PR

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1	APPEARANCES:	THE VIDEOTAPE DEPOSITION of THOMAS J. IRMITER is taken
2	MCWUIEDTOD CCOTT & DODDITT DI C	2 on this 28th day of February 2020, at Benchmark
3	MCWHERTOR SCOTT & BOBBITT PLC 54 Exeter Road	3 Reporting Agency, 450 South Ninth Street, Suite 450,
4	Suite D	4 Minneapolis, Minnesota, commencing at 8:57 a.m.
_	Jackson, Tennessee 38305	5 THE VIDEOGRAPHER: Good morning. We are on
5	Phone: 731.664.1340 Email: cscott@gilbertfirm.com	6 the record. Today's date is February 28, 2020, and the
6	-	7 time is 8:57 a.m. This is the videotape deposition of
7	By: Clinton H. Scott (Appearing telephonically)	8 Tom Irmiter, in the matter of Rocky Waters Motor Inn
,	For the Plaintiff	9 versus The Travelers Indemnity Company of America, Case
8		10 Number 3:19-CV-6, filed in the United States District
9 10	FORAN GLENNON PALANDECH PONZI & RUDOLPH PC	11 Court, Eastern District of Tennessee.
	222 North LaSalle Street	12 The court reporter's name is Christine Clark. My
11	Suite 1400 Chicago, Illinois 60601	13 name is Stephen Smith, the legal videographer. We are
12	Phone: 312.863.5000	14 with Benchmark Reporting Agency.
4.0	Email: bdevilling@fgppr.com	15 Would the attorneys please introduce themselves?
13	By: Brian E. Develling	16 MR. DEVILLING: Brian Devilling, for
14	For the Defendant	17 Travelers.
15 16		18 MR. SCOTT: Clint Scott, for the plaintiff.
17	ALSO PRESENT:	19 THE VIDEOGRAPHER: Thank you very much. The
18	Stephen Smith, Legal Videographer	20 court reporter will now swear in the witness and then
19 20		21 we can proceed.
21		22 THOMAS J. IRMITER,
22		23 a witness in the above-entitled action,
23 24		24 after having been first duly sworn,
25		25 deposes and testifies as follows:
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1	INDEX	
2		1 EXAMINATION
		1 EXAMINATION 2 BY MR. DEVILLING:
2	Examination by Mr. Devilling, Page 5	
3	Examination by Mr. Devilling, Page 5	2 BY MR. DEVILLING:
3 4	Examination by Mr. Devilling, Page 5  INDEX OF EXHIBITS	BY MR. DEVILLING:     Q. Okay. Mr. Irmiter, my name is Brian Devilling. I
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4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	INDEX OF EXHIBITS  NUMBER DESCRIPTION  1 Mr. Irmiter's CV, Page 9  2 January 22, 2018, Report to Howarth Group, from FBS of Rocky Waters Motor Inn, Page 44  3 January 22, 2018, Report to Howarth Group,	2 BY MR. DEVILLING: 3 Q. Okay. Mr. Irmiter, my name is Brian Devilling. I 4 represent Travelers in the Rocky Waters Motor Inn versus 5 Travelers Indemnity Company case. I understand you've 6 given a few depositions before, but I'll go over just 7 the ground rules very briefly. 8 If you don't understand a question that I ask, 9 please let me know. Okay? 10 A. All right. 11 Q. If you need a break, just let me know. We can take a 12 break any time. Okay? 13 A. Sounds good. 14 Q. If you could wait until I'm finished asking my question 15 before you give your answer. Okay? 16 A. Sounds good. 17 Q. And if you could answer with yes or no, as opposed to 18 uh-huh or uh-uh, it makes it easier for the court 19 reporter. Okay? 20 A. I'll do my best. 21 Q. All right. You are currently employed by Forensic 22 Building Science, Incorporated, correct?

	Page 6		Page 8
1	A. Yeah. It will take about an hour off the depo if you	1	Q. Okay. And what was that class?
2	do.	2	A. I can't it's 40 - 45 years ago.
3	Q. Sounds good. So what is	3	Q. Was it just like an introductory
4	A. Yes.	4	A. I can't remember.
5	Q. What's your position with FBS?	5	Q. Would it have been like an introductory type of
6	A. Well, my corporate position is CEO. My day-to-day	6	chemistry class?
7	activities include essentially running the business,	7	A. Sure.
8	doing field inspections, writing the reports, writing	8	Q. Ever taken a class in biology?
9	estimates and occasionally sitting in on depositions	9	A. Yes.
10	like this today and/or court trials.	10	Q. Was it also kind of an introductory type of biology
11	Q. Okay. What's your highest level of education?	11	class in college?
12	A. I have an undergraduate degree from the University of	12	A. Yes.
13	Hamline, in St. Paul.	13	Q. Anything beyond that?
14	Q. Is that in English, I understand?	14	A. Well, I know I took advanced chemistry and advanced
15	A. It is, yes.	15	biology and advanced physics in in high school. I
16	Q. Any specific emphasis?	16	went to a preparatory school, and this was back before
17	A. No.	17	they had advanced placement classes, but they were
18	Q. Okay. For example, sometimes there might be an emphasis	18	college level classes that I took in high school.
19	on language or literature or creative writing. Anything	19	Q. Any any classes in ecology, geology, thermodynamics?
20	like that?	20	A. No.
21	A. I'm sorry. Yes. Creative writing and English Lit.	21	Q. Okay. Do you have any medical training?
22	Q. Okay. Any degree beyond that?	22	A. No.
23	A. No.	23	Q. Are you a certified industrial hygienist?
24	Q. Okay. Any so no degrees in any scientific field?	24	A. No.
25	A. No. I have classes that I've taken, but no degrees.	25	Q. Okay.
	Page 7		Page 9
1	Q. Okay. In your college courses, did you take any classes	1	A. I have to back up. Medical training, I actually am a
2	in engineering?	2	certified athletic trainer. So
3	A. No.	3	Q. Oh, okay.
4	Q. In your college	4	A there's some medical training in that.
5	A. Well, not in my undergraduate. I have taken a class at	5	Q. Other than that, any medical training?
6	the University of Wisconsin School of Engineering in the	6	A. No. I can wrap your ankle if you sprained it.
7	Master's program. I was enrolling to get my master's	7	Q. Hopefully, that doesn't happen today.
8	degree about four years ago. Finished that first class		
		8	A. Yeah.
9	and then abandoned that program. It was just too too	8 9	<ul><li>A. Yeah.</li><li>Q. Any training in toxicology?</li></ul>
9 10	, ,	"	
	and then abandoned that program. It was just too too	9	Q. Any training in toxicology?
10	and then abandoned that program. It was just too too intensive for the career that I had at the time.	9	Q. Any training in toxicology?  A. No.
10 11	and then abandoned that program. It was just too too intensive for the career that I had at the time.  Q. What was that class that you took?	9 10 11	<ul><li>Q. Any training in toxicology?</li><li>A. No.</li><li>Q. Epidemiology?</li></ul>
10 11 12	and then abandoned that program. It was just too too intensive for the career that I had at the time.  Q. What was that class that you took?  A. It was a senior level project management class in	9 10 11 12	<ul><li>Q. Any training in toxicology?</li><li>A. No.</li><li>Q. Epidemiology?</li><li>A. No.</li></ul>
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10 11 12 13 14 15 16	and then abandoned that program. It was just too too intensive for the career that I had at the time.  Q. What was that class that you took?  A. It was a senior level project management class in engineering at the time.  Q. In your college courses, did you ever take anything in architecture?  A. Not from the University of Hamline. I have had two classes from a community college in one in	9 10 11 12 13 14 15 16	Q. Any training in toxicology?  A. No.  Q. Epidemiology?  A. No.  MR. DEVILLING: And I'm going to hand you what we'll mark as Exhibit 1.  (Exhibit 1 is marked for identification.)  MR. SCOTT: Mr. Devilling, can you tell me when you mark something what it is?
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10 11 12 13 14 15 16 17 18	and then abandoned that program. It was just too too intensive for the career that I had at the time.  Q. What was that class that you took?  A. It was a senior level project management class in engineering at the time.  Q. In your college courses, did you ever take anything in architecture?  A. Not from the University of Hamline. I have had two classes from a community college in one in architectural design and drafting, where we had to design an entire building essentially. So six six	9 10 11 12 13 14 15 16 17 18 19 20 21	Q. Any training in toxicology?  A. No.  Q. Epidemiology?  A. No.  MR. DEVILLING: And I'm going to hand you what we'll mark as Exhibit 1.  (Exhibit 1 is marked for identification.)  MR. SCOTT: Mr. Devilling, can you tell me when you mark something what it is?  MR. DEVILLING: Yeah. I was just waiting for her to mark it. It's a CV.  MR. SCOTT: Thank you.  Q. (MR. DEVILLING) Mr. Irmiter, is this a true and
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	Page 10		Page 12
1	A. Yes, it is. It's the it's the physical address. Two	1	A. Yes.
2	years three years ago we sold all of our brick and	2	Q. Okay. And then it says Insurance Appraisal and Umpire,
3	mortar around the country and everyone went virtual. So	3	correct?
4	my office is actually up in the clouds now.	4	A. Yes.
5	Q. Okay. It lists your licenses and certifications under	5	Q. And then certified Renovator - Lead Safety. What is
6	that, right?	6	that?
7	A. Yes.	7	A. Lead Safety.
8	Q. State of Minnesota Building Official is the first one	8	Q. I'm sorry. Lead Safety.
9	listed, correct?	9	A. Yeah. So it's a lead and asbestos certification.
10	A. Yes.	10	Q. Right.
11	Q. And you've held a State of Minnesota Building Official's	11	A. So, for example, if Rocky Waters were to be tested and
12	license since 2006, correct?	12	they had lead or asbestos, I could write an abatement
13	A. Yes.	13	program for that, qualified to do that. I could also
14	Q. What is having a Minnesota Building Official's license	14	monitor the abatement process, and I could also do
15	empower you to do?	15	clearance testing for that.
16	A. Well, Minnesota's the only state that licenses building	16	Q. Okay. As far as we know today, there's no lead or
17	code officials or offers training, licensing and	17	asbestos issues in the Rocky Waters' case, correct?
18	continuing education for building code officials. All	18	A. As far as we know.
19	states are governed by the International Code Council	19	Q. And then a vinyl siding installer, that's not applicable
20	family of codes, including, you know, Tennessee, for	20	in this case, correct?
21	example. So in in Minnesota, I or actually any	21	A. Correct.
22	state, I could if wanted to, I could apply for a	22	Q. And then it says Metro Skywarn Spotter. That's not
23	building code a position in the building code office	23	applicable in this case, correct?
24	either as an inspector or as the building code official	24	A. The only way the only reason it would be applicable
25	that runs the office, depending on what what their	25	here would be to look at the wind direction, and where
	D 44		
	Page 11		Page 13
1	Page 11 needs were.	1	Page $13$ the plume of smoke was. That's pretty well documented
1 2	_	1 2	•
	needs were.		the plume of smoke was. That's pretty well documented
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2	needs were.  Q. Have you ever held a position with a municipality or with a state as a building code official?	2	the plume of smoke was. That's pretty well documented by others, and but, yes, that would be the only thing that would apply here.
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1	Page 14		Page 16
	think it was maybe 1988, somewhere in that range. I	1	as a contractor. So the building official license is at
2	can't remember. Until 2000.	2	a is a higher tier and a more strenuous requirement.
3	Q. Was your contractor's license, was that in your name, or	3	So
4	was it in the name of a company?	4	Q. Were there any allegations of fraud that were brought
5	A. Both. You have what's called a qualifying person. I	5	against you by the Minnesota Department of Labor and
6	was the qualifying person. So the company, any any	6	Industry?
7	company that practices residential construction in the	7	A. By consumers, yes. Absolutely.
8	State of Minnesota is required to be licensed as a	8	Q. By consumers. You mean by consumers who had complained
9	result of that that legislation. And so you have a	9	to the Department of Labor?
10	qualifying person who holds the license for the entity.	10	A. Yes.
11	Q. Okay.	11	Q. Okay.
12	A. Yeah. And I was the qualifying person.	12	A. Yep.
13	Q. What was the entity?	13	Q. Do you know how many
14	A. Irmiter Contractors & Builders.	14	A. All of those were disproven by the way.
15	Q. Okay. Were you the owner of Irmiter Contractors &	15	Q. Do you know how many complaints consumers brought
16	Builders?	16	against you to the Minnesota Department of Labor and
17	A. Yes.	17	Industry?
18	Q. And then what happened to your license?	18	A. Don't recall.
19	A. The license was revoked after Irmiter Contractors &	19	Q. Okay.
20	Builders went through bankruptcy in 2000.	20	A. It was a lot.
21	Q. Why was it revoked?	21	Q. Do you remember if it was more than ten?
22	A. Couldn't pay my insurance. So, as soon as you can't pay	22	A. Don't know in terms of fraud.
23	your liability insurance, there a notices that goes from	23	Q. Okay.
24	the insurance carrier to the State of Minnesota and that	24	A. Yeah.
25	starts the suspension and revocation process.	25	Q. In the consent the revocation that occurred by the
	Page 15		Page 17
1	Q. Okay.	1	consent degree, were you required to admit those
2	A. As a result of that, there were also a number of	2	allegations?
3	allegations that were made about not paying	3	A. No, I was not. In fact the dissent decree,
4	nonpayment to subcontractors, employees, which happens	4	specifically, the deal that was put together was there
5	in a bankruptcy, and negotiated with the State of	5	would be no admission to any of those allegations in
6	Minnesota a revocation action. Gave them my license and	6	exchange for the license. And then all all
7	all the allegations were dropped.	7	allegations were dropped. They were never vetted
8	Q. Was that through a consent order?	8	through the courts. Nobody ever testified. Nobody ever
9	A. Yeah.	9	took testimony, just went away.
10	Q. Okay.	10	Q. Okay.
11	A. Yep.	11	A. And the bankruptcy expunged all of that basically.
12	Q. What year was that?	12	Q. All right. Have you ever worked as a contractor since
13	A. 2000.	13	your contractor's license was revoked?
	Q. Okay.	14	A. Well, Charlie Durenberger who runs the State of
14		15	Minnesota Licensing Division for contractors, he and I
14 15	A. Well, it might have been 2001. I 2000. 2000 it		-
14 15 16	was 20 years ago.	16	are good buddies now. In fact, his office just
14 15 16 17	was 20 years ago.  Q. Were there any additional allega well, first of all,	16 17	are good buddies now. In fact, his office just authorized this in December of last year, Forensic
14 15 16 17 18	was 20 years ago.  Q. Were there any additional allega well, first of all, what's the entity that would have brought those	16 17 18	are good buddies now. In fact, his office just authorized this in December of last year, Forensic Building Science to put together all of the training for
14 15 16 17 18 19	was 20 years ago.  Q. Were there any additional allega well, first of all, what's the entity that would have brought those allegations against you?	16 17 18 19	are good buddies now. In fact, his office just authorized this in December of last year, Forensic Building Science to put together all of the training for contractor licensing regarding building codes. So we
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14 15 16 17 18 19 20 21	was 20 years ago.  Q. Were there any additional allega well, first of all, what's the entity that would have brought those allegations against you?  A. Interestingly enough, it's the State of Minnesota Department of Labor and Industry, which is also the	16 17 18 19 20 21	are good buddies now. In fact, his office just authorized this in December of last year, Forensic Building Science to put together all of the training for contractor licensing regarding building codes. So we are we are we are doing all of the online training now for every contractor that needs to be licensed in
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14 15 16 17 18 19 20 21 22 23	was 20 years ago.  Q. Were there any additional allega well, first of all, what's the entity that would have brought those allegations against you?  A. Interestingly enough, it's the State of Minnesota Department of Labor and Industry, which is also the department in 2006, which, knowing full well about all of these allegations, allowed me to qualify and sit for	16 17 18 19 20 21 22 23	are good buddies now. In fact, his office just authorized this in December of last year, Forensic Building Science to put together all of the training for contractor licensing regarding building codes. So we are we are we are doing all of the online training now for every contractor that needs to be licensed in the State of Minnesota. So they obviously think we know what we're doing. The we do construction oversight
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	Page 18		Page 20
1	renovating a building, somebody's building ground-up,	1	you said FBS does building failure causation analysis,
2	somebody has a fire claim, the claim is all settled and	2	due diligence for purchase and scoping visits. Anything
3	they want somebody to monitor construction to make sure	3	else?
4	it's done correctly, not do the construction, but act as	4	A. Well, we write estimates. And then, through our sister
5	a construction manager, he's had no issue with that. So	5	company, as I indicated, we do construction oversight.
6	we perform that service under my sister company, Lindsay	6	Q. What was the name of that sister company again?
7	Consulting. In fact we're doing a very large fire	7	A. Lindsay Consulting. I also run all of the appraisal
8	rebuild in Birmingham, Alabama right now. It's a	8	work through Lindsay Consulting that I do.
9	five-story building.	9	Q. And you're the owner of Lindsay Consulting?
10	Q. And you're acting as a construction manager on that	10	A. Yes. I also run the arbitration work that I do. So,
11	project?	11	for example, I have a commercial arbitration in New York
12	A. Yeah. We're I was on the site last week. Yeah.	12	that is ongoing, and I'm one of the three arbitrators on
13	We're we're acting as a construction manager and	13	that.
14	doing clearance testing and all kinds of things. So	14	Q. Okay. How about in terms of serving as an appraiser and
	Q. Okay. Have you done any actual construction since	15	
15		16	umpire, is that something you do with FBS?
16	revocation of your license?		A. No. Through Lindsay Consulting.
17	A. Not for anybody but myself. I've renovated a few homes,	17	Q. Okay.
18	yeah.	18	A. Yeah.
19	Q. Okay.	19	Q. Well, let me ask you this, and in terms of you
20	A. I have no desire to work in that area. Don't need to.	20	personally, whether it's time spent with FBS or Lindsay
21	Q. Excuse me. The bankruptcy that led to the revocation of	21	Consulting, what percentage of your time is dedicated to
22	that license, was that a personal bankruptcy, or was	22	building failure causation analysis?
23	that the company?	23	A. I would say 40 to 50 percent of my time.
24	A. Both. Federal federal bankruptcy for my wife and I	24	Q. And what percentage of your time is dedicated to due
25	personally, and for the company.	25	diligence inspections for purchase?
	Page 19		Page 21
1	Page 19  Q. Okay. What is what would you say FBS does?	1	Page 21  A. About 15 percent of my time.
1 2	_	1 2	_
	Q. Okay. What is what would you say FBS does?		A. About 15 percent of my time.
2	Q. Okay. What is what would you say FBS does?  A. Well, FBS does building failure causation of all kinds,	2	A. About 15 percent of my time. Q. Okay. And how about scoping visits?
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2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	Q. Okay. What is what would you say FBS does?  A. Well, FBS does building failure causation of all kinds, and we also do due diligence for purchase of buildings. We also do about 30 percent of our work is what we call scoping visits, where we go out and we look at a property that has been alleged to have been damaged and ascertain whether or not we think that damage is related to the event that's being claimed. So, for example, these 56 buildings, all the shingles were damaged by wind and hail. So we'll go down and take a look at it and make a determination of whether we think that that in fact is the case with regard to the the storm event that somebody is alleging. And I said 30 percent. We do that on all of our wind, hail, flood, tornado, hurricane work. Every one of those gets a scoping visit. Thirty percent of those go away after the scoping visit, indicate meaning that we don't think there's anything there worth making a claim for.  Q. Okay.  A. We disagree with whoever looked at it before.  Q. Okay.  A. Yeah.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	A. About 15 percent of my time. Q. Okay. And how about scoping visits? A. I don't do scoping visits. Q. Okay. A. Our team does that. Q. Got it. All right. And A. I mean I'll do them occasionally, but, yeah. Q. And how about estimating? A. Estimating Q. Your time, personally. A. Yeah. Personally, probably about 15 percent of my time. Q. And how about your time personally spent doing construction oversight? A. Five to seven percent. Q. And how about your time personally serving as an appraiser or an umpire? A. That would pretty much be the rest. Q. Okay. A. I didn't I didn't add all those numbers up in my head, but Q. Fair enough. Neither did I. A we're getting we're getting close to that 100

1	Page 22		Page 24
1	Q. Okay.	1	A we just don't track it.
2	A. My wife certainly thinks I do.	2	Q. Taking Rocky Waters as an example.
3	Q. And then you also spend some time consulting as an	3	A. Yeah.
4	expert in litigation too, correct?	4	Q. You were aware that there was an insurance claim pending
5	A. I do, yeah.	5	when you got involved, correct?
6	Q. Okay.	6	A. No.
7	A. Yeah. It's about 20 percent of my work overall.	7	Q. No?
8	Q. All right.	8	A. No, not necessarily.
9	A. Yeah.	9	Q. All right.
10	Q. And is that through FBS or Lindsay Consulting?	10	A. No. Chuck we were hired by Chuck Howarth.
11	A. Both.	11	Q. Okay.
12	Q. As a litigation consultant, is there a reason that it	12	A. So, at that point in time, I'm not sure if there's an
13	might be done under the umbrella of FBS as opposed to	13	insurance claim. I don't even know if it's Travelers.
14	Lindsay Consulting?	14	Q. Okay.
15	A. Might be a tax reason.	15	A. I don't care.
16	Q. Okay. Other than other than that, any reason?	16	Q. You're aware you're aware Mr. Howarth is a public
17	A. No.	17	adjuster though, right?
18	Q. Okay. In this case you were acting under the umbrella	18	A. I am.
19	of FBS, correct?	19	Q. Okay.
20	A. Correct.	20	A. Yes.
21	Q. Okay. Any particular reason in this case that you acted	21	Q. And you're aware, you know what public adjusters do?
22	under the umbrella of FBS as opposed to Lindsay	22	A. Yes.
23	Consulting?	23	Q. Public adjusters represent insureds in insurance claims,
24	A. All of our fire work is done we actually have a third	24	correct?
25	entity that is not we really haven't an LLC that	25	A. They do, yes.
	Page 23		Page 25
1			
-	we haven't really jump started. We set it up about four	1	Q. Okay. Can you give me your I know you said you don't
2	we haven't really jump started. We set it up about four years ago. I think it's called Forensic Fire	1 2	Q. Okay. Can you give me your I know you said you don't track it specifically. But can you give me your best
2	years ago. I think it's called Forensic Fire	2	track it specifically. But can you give me your best
2	years ago. I think it's called Forensic Fire  Consultants. We were going to run our fire business	2	track it specifically. But can you give me your best estimate of the percentage of your work that's related
2 3 4	years ago. I think it's called Forensic Fire  Consultants. We were going to run our fire business  through that. We just have never done that. We just	2 3 4	track it specifically. But can you give me your best estimate of the percentage of your work that's related to insurance claims or litigation?
2 3 4 5	years ago. I think it's called Forensic Fire  Consultants. We were going to run our fire business  through that. We just have never done that. We just  run it through FBS.	2 3 4 5	track it specifically. But can you give me your best estimate of the percentage of your work that's related to insurance claims or litigation?  A. I would say that
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	Page 26		Page 28
1	Q. Okay. Were these what kind of inspections were	1	Q. And I may have asked a bad question. I think I asked
2	these?	2	you what percentage of your work is related to water
3	A. These were those were all wind and hail inspections.	3	intrusion and mold. Let me just break that up.
4	Q. Okay.	4	What percentage of your work today is related to
5	A. Yeah. Yep.	5	mold in some way or another?
6	Q. Have you ever been retained by a municipality to do	6	A. Probably 20 percent of the sampling that we do is
7	indoor air quality testing?	7	related to mold.
8	A. Yes. We have actually.	8	Q. And I assume
9	Q. Okay.	9	A. Yeah.
10	A. You got it.	10	Q that was much higher back about 10, 15 years ago?
11	Q. And in what context?	11	A. Yes.
12	A. Those were water damage claims back in the back in	12	Q. Okay.
13	the heyday of EIFS and Stocco and window failure cases.	13	A. Yeah, it was.
14	I've done about 7,500 of those around the country. We	14	Q. What percentage of your work today is related to
15	were hired by schools, municipalities, churches, all	15	let's just strike that question.
16	different types of entities, as well as residential	16	What percentage of your air sampling work is related
17	homes, to do sampling.	17	to fires?
18	Q. Okay.	18	A. Well, there's been a huge spike in that just since
19	A. Yeah.	19	January of this year. We seem to be out doing two or
20	Q. And do you know if do you know what percentage of	20	three a week right now. So the way it's trending in
21	those cases were involved in an insurance claim of some	21	2020, it's going to end up being about 30 percent of our
22	sort or active litigation?	22	business this year. It's been about five to seven
23	A. I have no idea. I have no idea. I know that there was	23	percent consistently since then, for the last four or
24	clearly a change once insurance policies restricted	24	five years.
25	coverage for mold, based on the Ballard case down in	25	Q. Okay. What percentage of your business is due to is
	Page 27		Page 29
1	Texas. So that changed the dynamic. People still had	1	related to wildfires?
2	problems. They still wanted to know what was going on,	2	A. This year that will trend at about 10 percent of that
3	but generally those were not insurance related claims.	3	30 percent. Yeah.
4	Q. Okay.	4	Q. Any particular wildfires, or
5	A. So	5	A. Doing a lot of work in California right now.
6	Q. Can you elaborate on that, where you were doing more	6	Q. Okay. How many how many matters were you involved in
7	mold related work or water intrusion work?	7	related to the 2016 Gatlinburg wildfires?
8	A. Yeah. Mold, mold related work to water instruction.	8	A. I think we did 30 to 40 structures and buildings down
9	Q. Prior to the Ballard case?	9	there of various types. Yeah.
10	A. Prior to the Ballard case, yeah.	10	Q. How many of those cases was Mr. Howarth involved in?
11	Q. Okay.	11	A. All of them.
12	A. And less as that as that changed policy languages.	12	Q. Okay.
13	Q. All right.	13	A. Yep.
14	A. Yeah. And also less as concurrent cause issues started	14	Q. How long have you known Chuck Howarth?
15	to come into policies.	15	A. About five years.
16	Q. What percentage of your work today is related to water	16	Q. And what's your understanding of what Mr. Howarth does?
17	intrusion or mold?	17	A. My understanding is that Mr. Howarth is a public
18	A. Probably in fact, we're going to be sampling next	18	adjuster, and that's that's about the extent. Yeah.
19	week in North Carolina on a hurricane claim. I would	19	I don't know. I actually don't know his background in
20	say we probably sample 50 percent of the time when there	20	terms of, you know, how he became a public adjuster, how
21	is water intrusion issues that have occurred. Now it's	21	he got his boots on the ground.
22	primarily for scope and safety reasons, health and	22	Q. Okay.
23	safety reasons.	23	A. Whether he was a contractor. I don't know any of that
24	Q. Okay.	24	stuff.
25	A. Yeah.	25	Q. Do you know anything about his technical background or

1 training or expertise other than the fact that he's a 2 public adjuster? 2 A. No. 3 A. I do, yes. Neil and I have worked together a lot ove 4 Q. Okay. Do you know what Mr. Howarth's role was in the 5 Rocky Waters' case? 6 A. No. I know he hired us to do sampling and that was it. 7 I don't know if he was a consultant for Rocky Waters. I 8 don't know if he was acting as a PA, what he was doing. 9 Q. Okay. 10 A. Because I had some projects with him where he is a 11 consultant. You know, he brought us in and he's not a 12 PA on it. So 13 A. Absolutely. Yes. 2 Q. Okay. And you know who Neil Carlson is, correct? 3 A. I do, yes. Neil and I have worked together a lot ove 4 the years. We met each other doing some of those E 6 deals. Neil I brought Neil into the largest 9 pharmaceutical disaster case in US history that I was 1 the expert on, out in Framingham, Massachusetts. If 8 a fungal meningitis case, and Neil was one of the 9 consultants I brought in on that case. 9 Q. That's how you first met him? 1 A. No, no. I had known him 10 years before that. 1 Q. How did you meet him? 1 A. No in that known him 10 years before that. 1 Q. How did you meet him? 1 A. I met him through I can't remember if it was the 1 there was a project here in Minnesota. It was the 1 there was a project here in Minnesota. It was the 1 there was a project here in Minnesota. It was the 1 there was a massive construction defect metals in the building, and it was a massive construction defect metals.	
A. No.  4 Q. Okay. Do you know what Mr. Howarth's role was in the  5 Rocky Waters' case?  6 A. No. I know he hired us to do sampling and that was it.  7 I don't know if he was a consultant for Rocky Waters. I  8 don't know if he was acting as a PA, what he was doing.  9 Q. Okay.  10 A. I do, yes. Neil and I have worked together a lot ove  4 the years. We met each other doing some of those E  5 deals. Neil I brought Neil into the largest  6 pharmaceutical disaster case in US history that I was  7 the expert on, out in Framingham, Massachusetts. It  8 don't know if he was acting as a PA, what he was doing.  9 Q. Okay.  9 consultants I brought in on that case.  10 Q. That's how you first met him?  11 consultant. You know, he brought us in and he's not a  12 PA on it. So  13 Q. For your work of any kind that's related to insurance  14 claims or active litigation, can you give me a percent  15 of that work that is where you're brought in on behalf  16 deals. Neil I brought in to the largest  17 the expert on, out in Framingham, Massachusetts. It  8 a fungal meningitis case, and Neil was one of the  9 consultants I brought in on that case.  10 Q. That's how you first met him?  11 A. No, no. I had known him 10 years before that.  12 Q. How did you meet him?  13 A. I met him through I can't remember if it was the  14 there was a project here in Minnesota. It was the  15 was the BlueCross BlueShield, I think, Insurance	
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14 claims or active litigation, can you give me a percent 15 of that work that is where you're brought in on behalf 16 there was a project here in Minnesota. It was the	
15 of that work that is where you're brought in on behalf 15 was the BlueCross BlueShield, I think, Insurance	
16 of the policyholder?	
16 of the policyholder? 16 <b>building, and it was a massive construction defect me</b>	d
17 A. It's probably in excess of 95 percent, yeah. 17 case. There were a whole bunch of different consults	ıts
18 Interestingly enough, however, the cases, of the 14, I 18 involved, and Neil was there. I think that's where I	
19 got 16 trials here that are and we update this every 19 met him the very first time.	
20 four years, but I think five of the four or five of 20 Q. Okay.	
21 the ones on here are for defense. 21 A. Yeah.	
22 Q. Okay. 22 Q. Can you give me an estimate of the number of matters or	
23 <b>A. So</b> 23 which you've worked with Neil Carlson?	
Q. How about within the last year, what percentage of your 24 A. Oh, man. I bet it's 500.	
25 litigation or insurance claim related cases are on 25 Q. Okay. How about over all, what are the number of	
Page 31 Page	33
1 behalf of the plaintiff or policyholder? 1 matters that you worked on with Chuck Howarth?	
2 A. Again, probably well over 95 percent, yeah. You have to 2 A. Well, I mentioned this 30 or so, or 40 in Gatlinburg	т
3 understand, this list that you have in front of you are 3 would say it's probably 100 total in the last six year	
4 actually things that went to a deposition or a trial. 4 O. And my understanding is that Mr. Howarth used to be	
5 <b>So we don't it doesn't hit this list. So I don't</b> 5 associated with George Keys, correct?	
6 necessarily 6 A. I actually didn't know that.	
7 Q. Sure. 7 Q. Okay.	
8 A remember it. I know that 94 percent of the projects 8 A. I've heard that recently. I did not know that he wa	į
9 that we issue a report on we never see the light of day 9 associated with George.	
10 <b>of that reporting.</b> 10 Q. Do you recall working any matters with Mr. Keys while	
11 Q. Okay. In other words 11 Mr. Howarth and Mr. Keys were associated?	
12 A. They go away. 12 A. I don't know the time frame. I will tell you that I	
13 Q. In other words, you might issue a report. It might 13 went down to Florida about nine years ago to meet	/ith
the insurance claim might be paid satisfactorily, or it  14 Mr. Keys over breakfast, to talk about looking at a	
15 might never go to litigation, correct? 15 <b>bunch of high-rises that had hurricane damage, and</b>	that
16 A. Who knows. 16 was the extent. We had we had a breakfast meet	ng
17 Q. Okay. 17 and nothing ever came of it.	
18 A. I mean we just never know what happens. We literally 18 Q. Okay.	
19 every quarter have to call all of the people that we 19 A. So so I've never worked with the guy.	
20 have open files on and find out. Oh, yeah, that's no 20 Q. Oh, okay.	
21 longer active. That's done. So 21 A. Yeah.	
22 Q. So, regardless of whether it went to deposition or went 22 Q. And I don't care about Mr. Keys in this case, but	
23 to trial, though, in excess of 95 percent of your work 23 <b>A. I know. I know. Yeah.</b>	
24 is on behalf of the policyholder or the plaintiff, 24 Q. I've heard the name in other cases, but	
25 correct? 25 <b>A. Oh, we all have, especially Colorado.</b>	

	Page 34		Page 36
	_		-
1	Q. Yeah. How about with Mr. Scott, Rocky Waters' attorney,	1	nine. So it still fell under the statute of repose for
2	how many matters have you had with Mr. Scott or his law	2	the general contractor. What we found is that when the
3	firm?	3	contractor that did the addition was cutting into the
4	A. I'll lean in and I'll say I've had the pleasure of	4	building, he had covered up all this rot. So he knew at
5	working with Mr. Scott probably about six times; six,	5	that point that this was going on. Did not notify the
6	seven times. Yeah.	6	owner. So because the statute of repose had gone past
7	Q. And have those all about been related to the Gatlinburg	7	the ten-year, these people had no action back against
8	wildfires?	8	the original builder. He got a get-out-of-jail-free
9	A. No. No. We just had a federal court case in Albany,	9	card. So the concept was is that this remodeler now
10	Georgia about a month ago, a hail case that went to	10	inherits this entire mess because of the fraudulent
11	trial, with him. We've had I had another trial that	11	concealing concealment.
12	we had with them, I think, last November. Somehow I	12	So I was asked to testify on the duties of a
13	think with them it has been more weather related stuff	13	licensed contractor, and the Court ruled that because I
14	that we've worked on.	14	didn't have a license at that time I could not testify
15	Q. Okay.	15	on those duties. I then became licensed as a building
16	A. We've done very little work in fire with them.	16	code official in 2006, which then took care of that
17	Q. Yeah. You actually	17	technical issue.
18	A. Yeah.	18	Q. Okay. Was that the Hopperstad case?
19	Q I think just answered my next question. What were	19	A. No.
20	the issues in the other cases	20	Q. No? Okay.
21	A. Yeah.	21	A. That's an interlocutory decision. I don't consider that
22	Q you've worked on with Mr. Scott's firm?	22	a ruling, but anyway. My
23	A. All weather.	23	Q. Well, what do you mean by that?
24	Q. Okay.	24	A. Well, it's not a published case. I mean that's a judge
25	A. Yeah.	25	ruling from the bench basically on the Hopperstad thing.
	Page 35		Page 37
1	_	1	So, yeah.
2	Q. How about Mr. Brandon McWherter? Have you had any additional cases with Mr. McWherter?	2	
3		3	Q. Okay. What was the ruling on the Hopperstad?  A. I don't recall.
4	A. When I say Scott, I basically say the firm.  Q. Okay.	4	Q. Okay.
5	A. So that would be McWherter or Scott.		
6		5	A. I know the case settled that day.
7	Q. Okay.	6	Q. Do you know, were you barred as an expert by that Court?
,	A. Yeah.	7	A. I may have been, yeah. Yeah.
8	Q. Have you ever been barred by a court as an expert?	8	Q. Are you aware
9	A. Yes.  O. Do you know how many times?	9	A. You know, Counsel, I'm going to tell you something. All
	,	10	of this has been vetted out. We we can spend all day
11	A. One time.	11	going through this, and you can file your motions in
12	Q. Okay. What case was that?	12	limine, but I will tell you that I'm guessing Mr. Scott
13	A. Back in 2005, it was here in Minnesota.	13	will respond with about 25 answers to that motion in
14	Q. Do you remember the name of the case?	14	limine that have been vetted out in virtually every
15	A. No. I can tell you the details. So this was back in	15	court in the land indicating that all of the stuff
16	the Stucco, water intrusion days. And a client with	16	you're talking about has no difference on my ability to
17	about a 12,000 square foot house was having some issues	17	testify as a causation
18	with mold coming in around their windows. We went out.	18	Q. Okay.  A damages and code expert. So I know you need to make
19	I personally went out and investigated, performed some	19 20	a record.
20	forensic cuts and determined that the house had been		
21	constructed improperly. Then also had had an addition	21	Q. Well, at this point <b>A. Yeah.</b>
22 23	that had been put on a year and-a-half before that.	23	Q I'm just asking questions.
23	Minnesota has a ten-year statute of repose against construction defects. I discovered this at year 11.	23	Q 1 m just asking questions.  A. I understand. I understand.
	The addition that had been put on was put on at year	25	Q. And I'm sure Mr. Scott will do a very fine job of that.
25			T I Dane Debet will do a very fine job of triat.

	Page 38		Page 40
1	A. I'm sure he will.	1	wildfire debris case?
2	Q. What about Church versus	2	A. They've all settled.
3	A. Including the four and-a-half hours of voir dire in	3	Q. Okay.
4	federal court two weeks ago.	4	A. Yeah.
5	Q. What about Church versus Church Mutual, Northern	5	Q. Can you tell me about how many reports you've authored
6	District of Illinois? Are you familiar with that case?	6	in wildfire debris cases?
7	A. Yeah. I wasn't barred in that case.	7	A. Probably 80 - 85, somewhere in that range.
8	Q. Okay.	8	Q. All different fires, or
9	A. I absolutely was not barred.	9	A. Yeah.
10	Q. Okay.	10	Q. Okay. Are you an expert in microscopy?
11	A. Disagree with that completely. Barring me from	11	A. No. I certainly understand the concepts of it. I've
12	testifying as opposed to	12	looked in the microscope with Neil, but, no, I'm not
13	Q. I'm just asking about	13	trained as a microscopist. I know how to say the word,
14	A dismissing my report. No, let's talk about the facts	14	which is probably the hardest thing.
15	on that case. You brought it up.	15	Q. Okay. Is there a particular material composition that
16	$\ensuremath{\mathrm{Q}}.$ I'm asking just asking about I'm asking you about the	16	wildfire residue has, if you know?
17	case.	17	A. Yes.
18	A. Yeah.	18	Q. And what is that?
19	Q. Just that's all I want to know	19	A. Well, typically wildfire is going to throw out char.
20	A. Great. Great. So	20	There will be some soot and the the distribution of
21	Q is your interpretation of that.	21	that material will change over time in terms of the
22	A. So we so we are I'm hired by the Voss Law Firm to	22	percentage of material that you see. So, for example,
23	determine what damage has been caused as a result of an	23	if you're sampling a location three days after the fire,
24	ice dam. I provide a lengthy report, including a	24	your char and your soot, if it's there, will be there.
		2.5	we
25	weather analysis of this. The insurance company files a	25	If you sample that location two years later, if it
25	weather analysis of this. The insurance company files a Page 39	25	Page 41
25		1	
	Page 39		Page 41
1	Page 39 motion to exclude, and the Voss Law Firm never responds	1	Page 41 hasn't been remediated, your char and your soot will
1 2	Page 39 motion to exclude, and the Voss Law Firm never responds to the motion, never responded to it. I hear about it	1 2	Page 41 hasn't been remediated, your char and your soot will still be there. All right. But the percentage of that
1 2 3	Page 39 motion to exclude, and the Voss Law Firm never responds to the motion, never responded to it. I hear about it six months later in a deposition. Two very important	1 2 3	Page 41 hasn't been remediated, your char and your soot will still be there. All right. But the percentage of that char and soot in that field will be less because of
1 2 3 4	Page 39 motion to exclude, and the Voss Law Firm never responds to the motion, never responded to it. I hear about it six months later in a deposition. Two very important facts that would have been responded to. One, the judge	1 2 3 4	Page 41 hasn't been remediated, your char and your soot will still be there. All right. But the percentage of that char and soot in that field will be less because of additional particulate that has come in.
1 2 3 4 5	Page 39 motion to exclude, and the Voss Law Firm never responds to the motion, never responded to it. I hear about it six months later in a deposition. Two very important facts that would have been responded to. One, the judge said that I had no training in weather, yet on my CV I'm	1 2 3 4 5	Page 41  hasn't been remediated, your char and your soot will still be there. All right. But the percentage of that char and soot in that field will be less because of additional particulate that has come in.  Q. Okay.
1 2 3 4 5	Page 39 motion to exclude, and the Voss Law Firm never responds to the motion, never responded to it. I hear about it six months later in a deposition. Two very important facts that would have been responded to. One, the judge said that I had no training in weather, yet on my CV I'm a Metro Trained Weather Spotter. I have specific	1 2 3 4 5 6	Page 41  hasn't been remediated, your char and your soot will still be there. All right. But the percentage of that char and soot in that field will be less because of additional particulate that has come in.  Q. Okay.  A. So, if I have 10 parts of char three days later, the 10
1 2 3 4 5 6	Page 39 motion to exclude, and the Voss Law Firm never responds to the motion, never responded to it. I hear about it six months later in a deposition. Two very important facts that would have been responded to. One, the judge said that I had no training in weather, yet on my CV I'm a Metro Trained Weather Spotter. I have specific training in analyzing weather and NOAA data, which I	1 2 3 4 5 6 7	Page 41  hasn't been remediated, your char and your soot will still be there. All right. But the percentage of that char and soot in that field will be less because of additional particulate that has come in.  Q. Okay.  A. So, if I have 10 parts of char three days later, the 10 parts of char don't go away. They become two parts of
1 2 3 4 5 6 7 8	Page 39 motion to exclude, and the Voss Law Firm never responds to the motion, never responded to it. I hear about it six months later in a deposition. Two very important facts that would have been responded to. One, the judge said that I had no training in weather, yet on my CV I'm a Metro Trained Weather Spotter. I have specific training in analyzing weather and NOAA data, which I did. That was never we never got a chance to respond	1 2 3 4 5 6 7 8	Page 41  hasn't been remediated, your char and your soot will still be there. All right. But the percentage of that char and soot in that field will be less because of additional particulate that has come in.  Q. Okay.  A. So, if I have 10 parts of char three days later, the 10 parts of char don't go away. They become two parts of char as a percentage because more particulate has been
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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	motion to exclude, and the Voss Law Firm never responds to the motion, never responded to it. I hear about it six months later in a deposition. Two very important facts that would have been responded to. One, the judge said that I had no training in weather, yet on my CV I'm a Metro Trained Weather Spotter. I have specific training in analyzing weather and NOAA data, which I did. That was never we never got a chance to respond to that.  Secondly, I rely which an expert can do on first-party testimony from the minister in the church. Walked through the church and said show me the old damage, show me the new damage. All right. Some of what I disagreed with him in terms of him saying it was new damage. All of that would have been vetted had we had a chance to answer this, but we I didn't have a chance to answer that. It turns out the guy that I got the information from wasn't even at the church at the time. So I relied on information that was incorrect. Didn't have a chance to to answer any of that. So, you know what. Yeah, that's out there. I don't believe that that barred me from testifying.	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	Page 41  hasn't been remediated, your char and your soot will still be there. All right. But the percentage of that char and soot in that field will be less because of additional particulate that has come in.  Q. Okay.  A. So, if I have 10 parts of char three days later, the 10 parts of char don't go away. They become two parts of char as a percentage because more particulate has been added.  Q. Okay. Beyond that, is there anything else unique about the composition of wildfire residue?  A. Well, it depends on the chemical analysis. I mean we certainly would in an elemental analysis, the compounds, the single elements, we might expect to see in an interior fire, for example, we might expect to see, depending on the age of the building, a lot of chlorine. In a wildfire, we might not see as much. We might see a lot of sodium in an interior fire because sodium is the single largest compound element that is used in building materials, to hold them together. It holds together Sheetrock. It holds together vinyl windows. It holds together vinyl base, carpeting. So

	Page 42		Page 44
1	elemental analysis on this case.	1	Waters Motor Inn, but it was also for Days Inn under
2	Q. Okay. Are you aware of any published studies describing	2	the Rocky Waters Motor Inn, LLC umbrella. And so we
3	the elemental composition of wildfire residue?	3	will supplement that. As we were asked to bring the
4	A. Absolutely. We've referenced them in our report.	4	file, we did produce the file materials for the Rocky
5	Q. Okay.	5	Waters Motor Inn, but not Days, but we'll get that done
6	A. Yeah.	6	promptly, and I apologize.
7	Q. Are you aware of any published studies regarding how to	7	MR. DEVILLING: No problem. I'm sure we can
8	differentiate between wildfire debris and other fire	8	get through this just fine. I will mark let me mark
9	debris?	9	Rocky Waters then as the as Exhibit 2.
10	A. Absolutely. We reference them in our report.	10	(Exhibit 2 is marked for identification.)
11	Q. Okay. And which studies are those referenced in your	11	MR. DEVILLING: And I'll mark Days Inn as
12	report?	12	Exhibit 3.
13	A. It's not a memory test. I'd have to see my report.	13	(Exhibit 3 is marked for identification.)
14	Q. All right. Well, here.	14	Q. (MR. DEVILLING) Okay. You've got Exhibit 2 and
15	A. Yeah.	15	Exhibit 3 in front of you. Do those appear to be your
16	MR. DEVILLING: Let's mark your report.	16	reports for the Rocky Waters Motor Inn and the Days Inn
17	Clint, I'm going to mark I'm going to mark Days	17	in Gatlinburg?
18	Inn as Exhibit 2.	18	A. Yes.
19	THE WITNESS: I thought we were hear for	19	Q. Okay. The reason I have handed those to you, I was
20	excuse me. I thought we were here for the Creek Side.	20	asking you about published studies to describe the
21	THE REPORTER: For the what? I didn't hear	21	elemental composition of wildfire debris. Can you
22	you.	22	identify, based on your reports there, which published
23	THE WITNESS: I thought we were here for	23	studies discuss the elemental composition of wildfire
24	Creek Side or whatever.	24	debris?
25	MR. DEVILLING: Rocky Waters.	25	A. There are none. I referenced we issue typically two
	Page 43		Page 45
1	_	,	_
1 2	THE WITNESS: Rocky Waters. Why would we be	1 2	types of reports for all of our fire investigation. One
2	THE WITNESS: Rocky Waters. Why would we be marking Days Inn?	2	types of reports for all of our fire investigation. One is a very condensed letter and the other is a report
2	THE WITNESS: Rocky Waters. Why would we be marking Days Inn?  MR. DEVILLING: They own both hotels.		types of reports for all of our fire investigation. One is a very condensed letter and the other is a report that cites the documents that we typically reference.
2 3 4	THE WITNESS: Rocky Waters. Why would we be marking Days Inn?  MR. DEVILLING: They own both hotels.  THE WITNESS: My understanding is I only	2	types of reports for all of our fire investigation. One is a very condensed letter and the other is a report
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2 3 4 5	THE WITNESS: Rocky Waters. Why would we be marking Days Inn?  MR. DEVILLING: They own both hotels.  THE WITNESS: My understanding is I only	2 3 4 5	types of reports for all of our fire investigation. One is a very condensed letter and the other is a report that cites the documents that we typically reference. It cites the ASTM standards that the testing is done under. That was not in done in this case. These are these are letters to Mr. Howarth. That was what we were
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	Page 46	Page	48
1	published papers on wildfires that we've dealt with. I	1 I or a fireplace. I don't burn plastic in my	
2	know there's some documents dealing with damage to	2 fireplace. Okay. So it will throw off a completely	
3	electrical components as a result of fires in general.	different appearance essentially.	
4	I know there are some NFPA codes and things that we	4 And then, of course, the last would be ash, whi	ich
5	reference and building codes. We typically would	5 is really getting down to the last elements before	
6	reference the building codes that are in place at the	6 kind of evaporates and completely disappears or	
7	time in that larger report. We would have gone more in	7 aerosolizes. Or so we're sampling primarily in	
8	depth typically on the design of the building, open	8 wildfires for char and soot.	
9	atmosphere building, and we talk a little bit about	9 Q. Okay.	
10	that, but how how air distributes. In other words,	10 A. Yeah.	
11	how did the how did the soot and/or char get into the	11 Q. So, if I'm understanding your answer, there's sort of	
12	attic.	these described different stages of the combustion	
13	Q. Okay.	process with soot being the I'm sorry. Char, the	
14	A. There's got to be a way for it to happen. So we would	,,	
15		char being the earliest stage in the combustion process and then soot, and then ash, right?	,
	go through that mechanism typically.	, , ,	
16	Q. Okay.	16 <b>A. Yes.</b>	
17 18	A. Yeah.	17 Q. And ash is, basically, it's burnt as much as it can	
	Q. Any other specific materials that you can recall right	18 possibly burn, right?	
19	now that address the elemental composition of wildfire	19 <b>A. Yes.</b>	
20	debris?	Q. Okay. And char is most determinative of a wildfire?	
21	A. No.	21 A. Yes. Yes.	
22	Q. Okay. You've used the term soot and you used the term	22 Q. Okay.	
23	char. Can you let's start with soot. What is soot?	A. That's typically what we see the most of in a wild	itire.
24	A. Well, soot is an aciniform, I believe is the term, and	Q. And why is char most consistent with a wildfire?	
25	it's when you have pyrolysis, which is the burning of a	25 A. Just the distribution of the of the wind. I mea	ın
	5 4-	Dava	
	Page 47	Page	49
1	Page 4/	Page  1 the way that the the way that the smoke is envel-	
1 2	-	_	oping
	of a product, whether it's wood, whether it's	1 the way that the the way that the smoke is enveloped	oping
2	of a product, whether it's wood, whether it's plastic, polymers, whatever, the it throws off,	the way that the the way that the smoke is envel- a building from the exterior and the the materials	oping s
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2 3 4	of a product, whether it's wood, whether it's plastic, polymers, whatever, the it throws off, obviously, smoke. That's that's why we know there's a fire going on. It throws off a smell. That's why we	the way that the the way that the smoke is envelored a building from the exterior and the the materials that are being distributed in a wildfire. There's just a lot more char than there is any of the soot kinds of	oping s : of
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	Page 50		Page 52
1 A. Abs	osolutely.	1	residue?
2 Q. Doe	es would an indoor fireplace produce soot?	2	A. That's a completely dependent question. That could
3 <b>A. Yes</b>	es.	3	change. That's a dynamic question. That could change
4 Q. An	outdoor fire pit would produce soot?	4	depending on the the type of leaf, the state of the
5 <b>A. Yes</b>	s.	5	leaf. So, no, I don't think that you could draw an
6 Q. Oka	ay. How about smoking cigarettes? Would that produce	6	absolute to say that. It might be different depending
7 soot	t?	7	on whether the cigarette is where the cigarette's
8 <b>A. A d</b>	different type, a nicotine type, yes.	8	manufactured as well. So I don't know that there is a
9 Q. Oka	ay.	9	one size fits all answer to that.
10 <b>A. We</b>	e've actually sampled for nicotine in restaurants that,	10	Q. Right.
11 you	ı know, used to allow smoking. Now there's a fire.	11	A. Yeah.
12 <b>And</b>	d we've been able to, through various labs that we	12	Q. And I'm not asking about
13 <b>wor</b>	rk with around the country, we've been able to find	13	A. Right.
14 <b>the</b>	actual soot from the fire that is embedded on top of	14	Q. I'm asking about leaf burning.
15 <b>the</b>	nicotine soot. It's a completely different	15	A. Right. I understand. I understand.
16 <b>com</b>	nposition.	16	Q. Okay.
17 Q. And	d what's the difference in composition?	17	A. Some of the same elements that would show up in a
18 <b>A. The</b>	e way it looks under the microscope.	18	wildfire on the indoor environment, you would expect
19 Q. Oka	ay.	19	would also show up from burning of leaves, because you
20 <b>A. Tha</b>	at's really the issue. Yeah. The way it looks under	20	would expect in a wildfire that there are leaves that
21 <b>the</b>	microscope and the chemical when I say chemical,	21	have burned.
22 <b>the</b>	elemental breakup of that material, how it's made	22	Q. Okay.
23 <b>up.</b>		23	A. So that would be a marker that you could look for.
24 Q. Oka	ay. Do you know do you know specifically what the	24	Q. We talked about indoor fireplace use a little bit.
25 elem	mental makeup is of cigarette smoke versus wildfire	25	Excuse me. What's the difference in elemental excuse
	Page 51		Page 53
1 smo	oke?	1	me. Let me just strike that question and finish
2 <b>A. I d</b>	don't recall seeing and I've studied this for 10	2	drinking my water.
3 <b>yea</b> i	ars all the literature that I can get my hands on. I	3	MR. DEVILLING: I'm losing my voice, Clint.
4 do r	not recall seeing a study it may be out there	4	This might be a short day.
5 Q. Oka	ay.	5	MR. SCOTT: I object to you drinking water
6 <b>A v</b>	where the elemental makeup of a cigarette of and by	6	then.
7 itse	elf versus the elemental makeup of a cigarette that	7	MR. DEVILLING: I might need to go get an IV
8 now	w has another complex, you know, fire burn added to	8	at the rate it's going. All right.
9 <b>it, a</b>	and what those elements would look like.	9	THE WITNESS: Let's hope you don't have
10 <b>T</b>	Typically what we would see with when we're	10	coronavirus because then all of us are going to be
11 aski	ring for elemental breakup, is we would see a chart	11	MR. DEVILLING: No, none of that, I don't
12 that	t lists the various elements that are there. There	12	think.
13 <b>may</b>	y be, you know, nine from the cause and origin	13	THE WITNESS: All right.
14 loca	ation. And then what we would do is those are	14	MR. DEVILLING: I did just take a vacation
15 <b>mar</b>	rkers. We would look for those similar markers at the	15	in China, but, no, I didn't.
	er locations, which would make that's one way of	16	MR. SCOTT: I had heard you were in the
<u> </u>	ring, yeah, this looks like it's from the fire.	17	Wuhan Province.
18 Q. Oka		18	MR. DEVILLING: Yeah. That's what I was
	at was not done by us in this case.	19	trying to think of.
_	you sit here today, do you know the difference	20	Q. (MR. DEVILLING) All right. What's the what's the
	mentally between cigarette smoke and wildfire smoke?	21	elemental difference between smoke generated from an
	o I know the difference elementary?	22	indoor fireplace as opposed to a wildfire?
-	ementally.	23	A. We will have more elements in a wildfire. There's no
24 <b>A. No</b>		24	question. Every time we've and in this case we did
25 Q. Oka	ay. How about between burnt leaves and wildfire	25	take concurrent tape lifts to have Carlson do

	Page 54		Page 56
1	presumptive and then to have the ability to send those	1	Q. Okay.
2	in to do an elemental analysis. That was not requested	2	A. Mr. Medina took his own and under chain of custody took
3	by the client.	3	them to a third-party lab.
4	Q. What do you mean presumptive?	4	Q. Was there a reason that you did not utilize a Level 4
5	A. Well, presumptive sampling, or some people call it Level	5	laboratory before issuing your report?
6	1. The ASTM D6603 calls it screening. It's a broad	6	A. As I indicated to you before, we have we had the
7	spectrum screening that is done to determine	7	samples to do that and we Mr. Howarth did not want to
8	distribution of particulate. If if that screening	8	do that.
9	comes back and there's just really little distribution,	9	Q. Okay.
10	there's no reason to go to another level of sampling.	10	A. We always do concurrent sampling. I mean, when you're
11	It's inexpensive. It's quick. The presumptive nature	11	there, why wouldn't you? It takes it's one extra
12	means that there are four of us here in this room. If	12	
13	we were all trained as microscopists, we would look	13	tape lift. You have them. It's one extra Air-O-Cell.
14	under that microscope at that sample and each of us,		So
		14	Q. So, if you were to do that, you would just take like two
15 16	based on our education, training and experience, would give an opinion of what we think we are seeing	15	tape lifts from the same area?
16		16	A. Yeah.
	underneath that microscope.	17	Q. And then send one to the Level 1 lab and one to the
18	Mr. Carlson's been teaching this for a number of	18	Level 4 lab?
19	years. I will tell you that in the cases where we have	19	A. Yes.
20	taken the concurrent samples, sent them, Carlson does	20	Q. Okay.
21	the screening, we send them to a secondary lab to do	21	A. And typically, if we were to take so, for example, we
22	what's called a Level 4 analysis, 85 percent of the time	22	just finished a large hotel project where we did 120
23	he is accurate on his presumptive. That was actually	23	samples. I think we have an additional 120 concurrent.
24	borne out in this case with the second set of sampling	24	If we were to send those back in for secondary sampling,
25	that was done by, I think it was Medina is the guy's	25	we wouldn't do all 120. We would look at the
	Page 55		Page 57
1	Page 55 name. So he confirmed that what Carlson was seeing was	1	Page 57
1 2	_	1 2	_
	name. So he confirmed that what Carlson was seeing was		distribution pattern and we'd say, okay, now let's send
2	name. So he confirmed that what Carlson was seeing was accurate as well. So	2	distribution pattern and we'd say, okay, now let's send in let's verify in these locations so that we can get
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2 3 4	name. So he confirmed that what Carlson was seeing was accurate as well. So  Q. Well, what is the difference between a Level 1 and Level 4 testing?	2 3 4	distribution pattern and we'd say, okay, now let's send in let's verify in these locations so that we can get an idea of how they're distributed.  Q. Is Mr. Carlson's lab capable of doing Level 4 testing,
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	Page 58	Page 60
1	Q. Okay.	1 Q. Do you know if there were any traces of fire retardant
2	A. I was there. I've been to Gatlinburg I think four or	2 in the debris samples that you took?
3	five times. I was there on the 29th of January, the	3 A. Not that we took. We didn't analyze to that level.
4	last time, of this year. I happened to be in Knoxville	4 Q. When you visited the Days Inn and Rocky Waters Motor Inn
5	for a deposition I believe it was. And so I went in a	5 on either occasion, did you wear any personal protective
6	day early and took the trip down there and went to both	6 equipment?
7	of these locations.	7 A. No.
8	Q. Okay.	8 Q. Okay. And who from your team actually took the samples
9	A. Yeah.	9 that Mr. Carlson tested?
10	Q. So that was the you said the 29th of January of this	10 A. Adam Piero.
11	year?	11 Q. Do you know if Mr. Piero wore any personal protective
12	A. 2020. Yeah.	12 equipment when he took those sample?
13	Q. Okay. Prior to that, had you been there?	13 A. Yes. He would have had and there's pictures of him.
14	A. Yes.	14 He would have his rubber gloves on, which he would
15	Q. What was the other occasion on which you were there?	change after each sample, which is our protocol, and he
16	A. I'd have to look back at the actual dates. Like I said,	16 would also have an N99 mask on.
17	I've been down there. I was down there for a two-day	17 Q. Like a dust mask?
18	appraisal hearing with Howarth on one of the restaurants	18 A. Yeah.
19	in town, where we provided testimony, both sides to the	19 Q. Okay. And what's the purpose of that dust mask? Is it
20	to an appraisal panel, and I we had already	20 so that the samples don't get contaminated?
21	sampled at some loca and I visited, you know, the	21 A. No. It's so he doesn't get contaminated.
22	next day a bunch of sites that we had already been to.	22 Q. Okay.
23	So	23 A. He's in somebody who might check into one of these
24	Q. Well, let's talk about those, those visits. During your	places and stay for a day or an evening, he's in these
25	first visit, did you speak with any employees of the	25 buildings all the time. His exposure to this material
	Page 59	Page 61
1	hotel?	1 is going to be much, much more extensive. So
2	A. No.	2 Q. Okay.
3	Q. Okay.	3 A there are instances when he will also we will
4	A. No. That was all that all that interaction was	4 we will suit up. We will Tyvek suit up. We'll actually
5	going to be done was done or was going to be done by	5 put on air respirators. We had a hotel in Los Angeles
6	my team.	6 that he and I did together where we did full hazmat
7	Q. Okay. How about during the second visit, did you speak	7 based on the damage and the asbestos that was in there.
8	with anyone who worked at the hotel?	8 Q. Any particular reason that either you or Mr. Piero did
9	A. No. Other than the person, hey, I'm and my staff	9 not use an air respirator during your visit?
10	would have called and arranged, hey, Tom's going to be	10 A. We didn't think that the level of contamination
11	in town, can he get access to the Yeah. Just like	11 warranted it.
12	the last just like on the 29th. We did the same	12 Q. Okay. Are you aware of any regulations requiring the
13	thing.	13 use of personal protective equipment for wildfire
14	Q. Did you ever conduct any interviews, whether it was in	14 cleanup?
15	person or by phone, with any employees of Rocky Waters	15 A. Yes.
16	Motor Inn or Days Inn?	16 Q. And what regulations are those?
17	A. No.	A. You need to be suited up, depending on the extent of the
18	Q. Do you know do you know whether there were any	damage. And you may bring in environmental engineering
19	chemicals that were used to retard the Gatlinburg fires?	19 controls. You may have HEPAs running. The the issue
20	A. Offhand, as I sit here today, I do not.	20 there is that it is it is understood that you will be
21	Q. Okay.	21 likely doing some destructive work. So you will be
22	A. It would certainly make sense.	22 aerosolizing the materials, which I found interesting in
23	Q. Would you typically expect to see traces of fire	23 Medina, for example, a couple of his sample locations
24	retardant in wildfire debris?	24 attempted to reenergize inside CMU blocks by blowing air
25	A. It's possible, yes.	25 into that. His samples were occluded with too much

	Page 62	Page 64
1	material, which I I thought would have happened. We	1 level of soot that would cause adverse human health
2	tried that in the past and don't do that.	2 effects?
3	Here we're walking into an area where we're not	3 A. Were at mold we're at where mold was 20 years ago.
4	it's not a construction site. You're not knocking over	4 All right. So the the medical link to that. So we
5	walls. You're not aerosolizing dust and those kinds of	5 have to look at what is OSHA recommending. What are the
6	things. So that protocol has been put in place by OSHA,	6 what are the practical kinds of things. Our position
7	I believe.	7 is that and honestly it appears to me that Travelers
8	Q. Okay.	8 took this position as well based on their initial
9	A. Yeah.	9 estimate. They're they're providing a scope of work
10	Q. So is that an OSHA protocol that applies when one would	10 to clean this building. So they must have recognized
11	expect whatever debris is there to be to be	11 that it's an issue. I think the problem is we don't
12	resuspended in the air?	12 think Travelers went far enough. They didn't sample.
13	A. Yes.	13 They didn't they didn't literally develop a scope
14	Q. Okay.	14 that was correct. So that's really the the issue
15	A. Yep. This as I said before, the site down in	15 here.
16	Birmingham, Alabama, which is undergoing remediation, if	16 Q. Okay. Well, regardless of what Travelers did in this
17	you walk down to that site like I did last week, you	17 case, are you aware of any study that sets forth a
18	would see each level is there are three different	18 threshold level of soot residue related to causing
19	door systems that you have to walk through. There are	19 health issues in humans?
20	HEPAs running and everybody is wearing PPE and Tyvek	20 <b>A. No.</b>
21	suits	21 O. Okay.
22	Q. Okay.	22 A. No.
23	A during the remediation. That's a fairly extensive	23 Q. Now, are you I'm going to ask the same question
24	one.	24 slightly differently. Are you aware of any studies
25	Q. Do you know what that OSHA regulation is?	25 establishing a threshold level of wildfire debris that
	Page 63	Page 65
1	Page 63  A. We cite it generally in our overall reports, but, no, I	Page 65  1 causes adverse health effects in humans?
1 2	_	
	A. We cite it generally in our overall reports, but, no, I	1 causes adverse health effects in humans?
2	A. We cite it generally in our overall reports, but, no, I don't have the number on it.	1 causes adverse health effects in humans? 2 <b>A. No.</b>
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2 3 4	A. We cite it generally in our overall reports, but, no, I don't have the number on it.  Q. Okay. Are you aware of any published studies correlating soot levels with adverse human health	1 causes adverse health effects in humans? 2 A. No. 3 Q. Okay. 4 A. There are anecdotal references, but there is no there
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2 3 4 5 6 7	A. We cite it generally in our overall reports, but, no, I don't have the number on it.  Q. Okay. Are you aware of any published studies correlating soot levels with adverse human health effects?  A. There are some studies that have been put out by various firefighter organizations that we reference linking	<ol> <li>causes adverse health effects in humans?</li> <li>A. No.</li> <li>Q. Okay.</li> <li>A. There are anecdotal references, but there is no there is no defined recognized peer reviewed study that I am aware of.</li> <li>Q. So you brought up mold. You made and if I misquote</li> </ol>
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2 3 4 5 6 7 8 9 10 11 12 13	A. We cite it generally in our overall reports, but, no, I don't have the number on it.  Q. Okay. Are you aware of any published studies correlating soot levels with adverse human health effects?  A. There are some studies that have been put out by various firefighter organizations that we reference linking cancer to the likely and I use that in air quotes exposure to fire particulate, including soot. The issue really becomes particle size, and I I think we actually reference do we reference that in here, in this report? We do. We reference something from the International Agency of Research on Cancer, IARC. Those studies are I guess I would it put in much like	1 causes adverse health effects in humans? 2 A. No. 3 Q. Okay. 4 A. There are anecdotal references, but there is no there 5 is no defined recognized peer reviewed study that I am 6 aware of. 7 Q. So you brought up mold. You made and if I misquote 8 you, let me know, but I think you made this statement 9 that we are kind of where we were with mold 20 years 10 ago. Are you talking about in terms of the progress of 11 the studies on the issue? 12 A. That's what I mean, yeah. 13 Q. Okay. 14 A. I mean we know that let's take aspergillus,
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2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	A. We cite it generally in our overall reports, but, no, I don't have the number on it.  Q. Okay. Are you aware of any published studies correlating soot levels with adverse human health effects?  A. There are some studies that have been put out by various firefighter organizations that we reference linking cancer to the likely and I use that in air quotes exposure to fire particulate, including soot. The issue really becomes particle size, and I I think we actually reference do we reference that in here, in this report? We do. We reference something from the International Agency of Research on Cancer, IARC. Those studies are I guess I would it put in much like asbestos. We're in the infancy stage of a lot of this research. The studies are now all of a sudden you go back five years ago, there was one. Now there's 15. Exponentially this is being looked at as a major issue finally. The problem is right now there are no thresholds. There are none. We do not know at what point in time or what the exposure limits should be. So our position is it's got to go.	1 causes adverse health effects in humans? 2 A. No. 3 Q. Okay. 4 A. There are anecdotal references, but there is no there is no defined recognized peer reviewed study that I am aware of. 7 Q. So you brought up mold. You made and if I misquote you, let me know, but I think you made this statement that we are kind of where we were with mold 20 years ago. Are you talking about in terms of the progress of the studies on the issue? A. That's what I mean, yeah. Q. Okay. A. I mean we know that let's take aspergillus, penicillium. There's four of us in the room. You may react at 1,500 colony-forming units and our videographer might react at 100,000 colony-forming units in the same room. So how do you define in that situation? So then the practice has been then you you clean to the lowest threshold 21 Q. Okay. A of exposure because you do not know who
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	A. We cite it generally in our overall reports, but, no, I don't have the number on it.  Q. Okay. Are you aware of any published studies correlating soot levels with adverse human health effects?  A. There are some studies that have been put out by various firefighter organizations that we reference linking cancer to the likely and I use that in air quotes exposure to fire particulate, including soot. The issue really becomes particle size, and I I think we actually reference do we reference that in here, in this report? We do. We reference something from the International Agency of Research on Cancer, IARC. Those studies are I guess I would it put in much like asbestos. We're in the infancy stage of a lot of this research. The studies are now all of a sudden you go back five years ago, there was one. Now there's 15.  Exponentially this is being looked at as a major issue finally. The problem is right now there are no thresholds. There are none. We do not know at what point in time or what the exposure limits should be. So our position is it's got to go.  Q. Okay. That was my next question	a. No.  A. No.  Q. Okay.  A. There are anecdotal references, but there is no there is no defined recognized peer reviewed study that I am aware of.  Q. So you brought up mold. You made and if I misquote you, let me know, but I think you made this statement that we are kind of where we were with mold 20 years ago. Are you talking about in terms of the progress of the studies on the issue?  A. That's what I mean, yeah.  Q. Okay.  A. I mean we know that let's take aspergillus, penicillium. There's four of us in the room. You may react at 1,500 colony-forming units and our videographer might react at 100,000 colony-forming units in the same room. So how do you define in that situation? So then the practice has been then you you clean to the lowest threshold  Q. Okay.  A of exposure because you do not know who particularly in a hotel, you don't know who's coming in
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	A. We cite it generally in our overall reports, but, no, I don't have the number on it.  Q. Okay. Are you aware of any published studies correlating soot levels with adverse human health effects?  A. There are some studies that have been put out by various firefighter organizations that we reference linking cancer to the likely and I use that in air quotes exposure to fire particulate, including soot. The issue really becomes particle size, and I I think we actually reference do we reference that in here, in this report? We do. We reference something from the International Agency of Research on Cancer, IARC. Those studies are I guess I would it put in much like asbestos. We're in the infancy stage of a lot of this research. The studies are now all of a sudden you go back five years ago, there was one. Now there's 15.  Exponentially this is being looked at as a major issue finally. The problem is right now there are no thresholds. There are none. We do not know at what point in time or what the exposure limits should be. So our position is it's got to go.  Q. Okay. That was my next question  A. Yeah.	a. No.  Q. Okay.  A. There are anecdotal references, but there is no there is no defined recognized peer reviewed study that I am aware of.  Q. So you brought up mold. You made and if I misquote you, let me know, but I think you made this statement that we are kind of where we were with mold 20 years ago. Are you talking about in terms of the progress of the studies on the issue?  A. That's what I mean, yeah.  Q. Okay.  A. I mean we know that let's take aspergillus, penicillium. There's four of us in the room. You may react at 1,500 colony-forming units and our videographer might react at 100,000 colony-forming units in the same room. So how do you define in that situation? So then the practice has been then you you clean to the lowest threshold  Q. Okay.  A of exposure because you do not know who particularly in a hotel, you don't know who's coming in that room the next week or the next day. It could be
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	A. We cite it generally in our overall reports, but, no, I don't have the number on it.  Q. Okay. Are you aware of any published studies correlating soot levels with adverse human health effects?  A. There are some studies that have been put out by various firefighter organizations that we reference linking cancer to the likely and I use that in air quotes exposure to fire particulate, including soot. The issue really becomes particle size, and I I think we actually reference do we reference that in here, in this report? We do. We reference something from the International Agency of Research on Cancer, IARC. Those studies are I guess I would it put in much like asbestos. We're in the infancy stage of a lot of this research. The studies are now all of a sudden you go back five years ago, there was one. Now there's 15.  Exponentially this is being looked at as a major issue finally. The problem is right now there are no thresholds. There are none. We do not know at what point in time or what the exposure limits should be. So our position is it's got to go.  Q. Okay. That was my next question	a. No.  A. No.  Q. Okay.  A. There are anecdotal references, but there is no there is no defined recognized peer reviewed study that I am aware of.  Q. So you brought up mold. You made and if I misquote you, let me know, but I think you made this statement that we are kind of where we were with mold 20 years ago. Are you talking about in terms of the progress of the studies on the issue?  A. That's what I mean, yeah.  Q. Okay.  A. I mean we know that let's take aspergillus, penicillium. There's four of us in the room. You may react at 1,500 colony-forming units and our videographer might react at 100,000 colony-forming units in the same room. So how do you define in that situation? So then the practice has been then you you clean to the lowest threshold  Q. Okay.  A of exposure because you do not know who particularly in a hotel, you don't know who's coming in

	Page 66		Page 68
1	had a liver transplant. I mean we know that through the	1	would be a sign that there was an issue in the building,
2	mold studies and the work that we've done with that, we	2	correct?
3	know that there are at-risk populations that have been	3	A. Yes.
4	identified. That hasn't been done yet either, but I	4	Q. All right.
5	most likely somebody's working on that. I don't know.	5	A. Typically that would be a sign.
6	Q. You say that hasn't been done yet either. You mean with	6	Q. Is there a particular level of interior mold that, you
7	respect to soot levels?	7	know, without regard to how it compares to the exterior
8	A. Correct.	8	levels, would would warrant a remediation?
9	Q. Okay. So is there a generally accepted threshold level	9	A. Well, the general the general accepted practice is,
10	of mold contamination that warrants a cleanup?	10	number one, if you can see it, get rid of it. Okay. If
11	A. The general accepted practice is to take an ambient	11	you can visually identify what you think is mold and you
12	sample on the exterior of the building, at least one,	12	can actually see the hyphae, which so you know it's mold
13	sometimes two, to compare the species of mold that are	13	and not just a black spot, get rid of it. The the
14	found on the interior of the building to make sure that	14	secondary piece of that is figuring out why it why it
		15	
15 16	you have exactly the same species. So, if on the	16	came. Just because you get rid of it, doesn't mean that it won't come back.
17	exterior I don't get Stachybotrys, but on the interior I do, that's a concern. Okay. Because I should have the	17	Q. Mm-hmm.
	•		
18 19	same. And then the levels of colony-forming units should be less than the exterior on the interior	18 19	A. So what we need it's turning into a mold discussion. We need water. We need a food source and
20	samples. So, if I get cladosporium on the exterior,	20	
			we need the right temperature for mold. Those three
21	which is a common mold you find everywhere, and I have	21	things. So typically the process is you can't eliminate
22	100,000 colony forming units and on the interior in	22	the food source and you can't eliminate temperature. So
23	certain locations I get a million, that's a concern.	23	get rid of the water. Keep it dry. You're not going to
24	Why do I have such a high spike? That's probably a	24	have a problem.
25	water related issue that's causing that. Let's figure	25	What you're asking me is, is there an accepted
	Page 67		Page 69
1	Page 67 it out. So that has not been done yet with soot and	1	Page 69
1 2	_	1 2	-
	it out. So that has not been done yet with soot and		level. It depends on the individual and it depends on
2	it out. So that has not been done yet with soot and char.	2	level. It depends on the individual and it depends on the type of mold. We know that there are some
2	it out. So that has not been done yet with soot and char.  Q. But is there is there a generally accepted level of	2	level. It depends on the individual and it depends on the type of mold. We know that there are some identifiable molds that are very concerning; Chaetomium,
2 3 4	it out. So that has not been done yet with soot and char.  Q. But is there is there a generally accepted level of mold particulates that causes adverse health effects in	2 3 4	level. It depends on the individual and it depends on the type of mold. We know that there are some identifiable molds that are very concerning; Chaetomium, Fusarium, aspergillus, penicillium that is in chains,
2 3 4 5	it out. So that has not been done yet with soot and char.  Q. But is there is there a generally accepted level of mold particulates that causes adverse health effects in humans?	2 3 4 5	level. It depends on the individual and it depends on the type of mold. We know that there are some identifiable molds that are very concerning; Chaetomium, Fusarium, aspergillus, penicillium that is in chains, which means that it's an active mold, and Stachybotrys.
2 3 4 5 6	it out. So that has not been done yet with soot and char.  Q. But is there is there a generally accepted level of mold particulates that causes adverse health effects in humans?  A. Mold?	2 3 4 5 6	level. It depends on the individual and it depends on the type of mold. We know that there are some identifiable molds that are very concerning; Chaetomium, Fusarium, aspergillus, penicillium that is in chains, which means that it's an active mold, and Stachybotrys. Those are four that we get very, very concerned about
2 3 4 5 6	it out. So that has not been done yet with soot and char.  Q. But is there is there a generally accepted level of mold particulates that causes adverse health effects in humans?  A. Mold?  Q. Yeah.	2 3 4 5 6 7	level. It depends on the individual and it depends on the type of mold. We know that there are some identifiable molds that are very concerning; Chaetomium, Fusarium, aspergillus, penicillium that is in chains, which means that it's an active mold, and Stachybotrys. Those are four that we get very, very concerned about that we wouldn't typically see in the interior
2 3 4 5 6 7 8	it out. So that has not been done yet with soot and char.  Q. But is there is there a generally accepted level of mold particulates that causes adverse health effects in humans?  A. Mold?  Q. Yeah.  A. Depends on the individual.	2 3 4 5 6 7 8	level. It depends on the individual and it depends on the type of mold. We know that there are some identifiable molds that are very concerning; Chaetomium, Fusarium, aspergillus, penicillium that is in chains, which means that it's an active mold, and Stachybotrys. Those are four that we get very, very concerned about that we wouldn't typically see in the interior environment. So those are the markers that at least we
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2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	it out. So that has not been done yet with soot and char.  Q. But is there is there a generally accepted level of mold particulates that causes adverse health effects in humans?  A. Mold?  Q. Yeah.  A. Depends on the individual.  Q. Yeah.  A. Totally depends on the individual.  Q. Is there  A. So  Q. If I understand your previous answer that  A. And let me just, if I can, back up. So so in the in the fungal meningitis case, I mean people were being injected with Exophiala, which is a mold that had never ever showed up in the literature before. So it's a dynamic process  Q. Sure.  A with all of this stuff. Yeah.  Q. Okay. In the mold testing you described earlier, you're comparing exterior samples to interior samples, correct?  A. Yes. Ambient.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	level. It depends on the individual and it depends on the type of mold. We know that there are some identifiable molds that are very concerning; Chaetomium, Fusarium, aspergillus, penicillium that is in chains, which means that it's an active mold, and Stachybotrys. Those are four that we get very, very concerned about that we wouldn't typically see in the interior environment. So those are the markers that at least we look for.  Q. Okay. All right. Let's talk about the I just want to start with the the Days Inn. In general terms, that building has room spaces and it has an attic space above those room spaces, correct?  A. Yes. Q. Okay. Does the air in the attic connect with the air in the rooms?  A. Yes. Q. How so?  A. It's an open bypass system. Any any hole, any any opening that you have, any wire, any chaseway, any of those kinds of things is going to create an open bypass. So, under the definitions in the fire code, it is what is called an open atmosphere building.

	Page 70		Page 72
1	other part. Any fire stopping that is in place is	1	electrical charge to it. And as a result of the fire,
2	designed to stop fire. It does not stop air movement.	2	what happens is, as it's being distributed, it looks for
3	Q. Okay. So just, as an example, in the room we're sitting	3	the coolest surface it can find to bond to. It
4	in here, we have a number of recessed lights in the	4	literally bonds to that surface. That's why when we
5	ceiling. If I'm understanding you, that the air from	5	tape lift it we can find it on that surface.
6	this room might connect to some attic space through gaps	6	What we have found through our studies is that when
7	around those recessed lights as an example?	7	there is a change in due point or vapor drive within the
8	A. Well, and, more importantly, behind you is an outlet in	8	building, which occurs when it gets humid outside, all
9	the wall. There's an opening right there behind that	9	right, or a temperature inversion of some kind, that
10	fire alarm. The that wall, one of two things is	10	material actually debonds and aerosolizes by itself.
11	going to happen with that wall. That wall is going to	11	That's why you hear from consumers typically six months
12	go all the way up to the floor and it's going to create	12	after they remediated my house, I go in, and all of a
13	a firewall, or it's going to stop just above the	13	sudden I'm smelling smoke. Well, the correlation
14	ceiling. And so I might pop my ceiling my head here,	14	between that is when you look at the weather there was a
15	and I may be able to look all the way out, past the	15	spike in humidity outside. That aerosolized that
16	doors of this office, down into the next office and down	16	material. That's that's the issue. So
17	into the hallway. So, if in fact I have a fire in this	17	Q. Are you aware of any specific complaints of smoke odors
18	room, it is because it's if it's an open atmosphere,	18	from occupants in either the Rocky Waters Motor Inn or
19	there's a very good chance that my particulate would	19	the Days Inn?
20	spread throughout the entire building.	20	A. I've not reviewed any any documents to that effect.
21	Q. Okay. Are is the attic vented into the into the	21	Q. Okay.
22	rooms?	22	A. Well, and, if I can, I think one of the one of the
23	A. No.	23	misconceptions is, is that and this is changing. But
24	Q. Okay. My understanding is that each room has its own	24	one of the misconceptions is that you that the two
25	wall HVAC unit; is that correct?	25	benchmarks for determining if there's damage is, one, if
	Page 71		Page 73
1	A. Yeah. It's called a PTAC unit through the through	1	you've got I need to see it, and, two, I need to
2	the exterior.	2	smell it.
3	Q. And that's a that's like a wall air-conditioner that	3	Q. Sure.
4	separates the interior from the exterior through the	4	A. And that's changing based on the sampling that's being
5	wall, right?		
		5	done and the the research that's being done.
6	A. Yeah. And these are actually heat pumps. They serve as	5 6	done and the the research that's being done.  Q. When you visited the Rocky Waters Motor Inn and the Days
6 7	A. Yeah. And these are actually heat pumps. They serve as both the air-conditioner and the heater.		_
		6	Q. When you visited the Rocky Waters Motor Inn and the Days
7	both the air-conditioner and the heater.	6 7	Q. When you visited the Rocky Waters Motor Inn and the Days Inn, could you detect any smoke odors?
7 8	both the air-conditioner and the heater.  Q. Okay. Is there any sort of central air-conditioning system at either of these hotels?  A. No. I do not believe so.	6 7 8	Q. When you visited the Rocky Waters Motor Inn and the Days Inn, could you detect any smoke odors?  A. No, I did not. I know that they've cleaned. I mean I
7 8 9 10 11	both the air-conditioner and the heater.  Q. Okay. Is there any sort of central air-conditioning system at either of these hotels?  A. No. I do not believe so.  Q. And we were talking about Days Inn. Is Rocky Waters	6 7 8 9 10	<ul> <li>Q. When you visited the Rocky Waters Motor Inn and the Days Inn, could you detect any smoke odors?</li> <li>A. No, I did not. I know that they've cleaned. I mean I know</li> <li>Q. Sure.</li> <li>A they wiped everything down. So</li> </ul>
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7 8 9 10 11 12 13 14 15 16 17	both the air-conditioner and the heater.  Q. Okay. Is there any sort of central air-conditioning system at either of these hotels?  A. No. I do not believe so.  Q. And we were talking about Days Inn. Is Rocky Waters Motor Inn also an open atmosphere building?  A. Yes.  Q. Okay. And that also has an attic space?  A. Yes, it does.  Q. Do you have an opinion on the actual probability that wildfire debris in the attic space could resuspend in the air?	6 7 8 9 10 11 12 13 14 15 16 17	<ul> <li>Q. When you visited the Rocky Waters Motor Inn and the Days Inn, could you detect any smoke odors?</li> <li>A. No, I did not. I know that they've cleaned. I mean I know</li> <li>Q. Sure.</li> <li>A they wiped everything down. So</li> <li>Q. When you visited these hotels, did you go up in the attic?</li> <li>A. I did not in either case. They had already. Our guys had already done that. They photographed it. I what I look for when I'm there is I'm really looking at these from a building science standpoint. That's one of the concerns that I have with hygienists doing this type of</li> </ul>
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7 8 9 10 11 12 13 14 15 16 17 18 19 20	both the air-conditioner and the heater.  Q. Okay. Is there any sort of central air-conditioning system at either of these hotels?  A. No. I do not believe so.  Q. And we were talking about Days Inn. Is Rocky Waters Motor Inn also an open atmosphere building?  A. Yes.  Q. Okay. And that also has an attic space?  A. Yes, it does.  Q. Do you have an opinion on the actual probability that wildfire debris in the attic space could resuspend in the air?  A. Yes.  Q. And what is that?	6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	Q. When you visited the Rocky Waters Motor Inn and the Days Inn, could you detect any smoke odors?  A. No, I did not. I know that they've cleaned. I mean I know Q. Sure.  A they wiped everything down. So Q. When you visited these hotels, did you go up in the attic?  A. I did not in either case. They had already. Our guys had already done that. They photographed it. I what I look for when I'm there is I'm really looking at these from a building science standpoint. That's one of the concerns that I have with hygienists doing this type of work. Hygienists typically don't understand building science and air movement and building codes. So I'm
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	both the air-conditioner and the heater.  Q. Okay. Is there any sort of central air-conditioning system at either of these hotels?  A. No. I do not believe so.  Q. And we were talking about Days Inn. Is Rocky Waters Motor Inn also an open atmosphere building?  A. Yes.  Q. Okay. And that also has an attic space?  A. Yes, it does.  Q. Do you have an opinion on the actual probability that wildfire debris in the attic space could resuspend in the air?  A. Yes.  Q. And what is that?  A. Absolutely.	6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	Q. When you visited the Rocky Waters Motor Inn and the Days Inn, could you detect any smoke odors?  A. No, I did not. I know that they've cleaned. I mean I know Q. Sure.  A they wiped everything down. So Q. When you visited these hotels, did you go up in the attic?  A. I did not in either case. They had already. Our guys had already done that. They photographed it. I what I look for when I'm there is I'm really looking at these from a building science standpoint. That's one of the concerns that I have with hygienists doing this type of work. Hygienists typically don't understand building science and air movement and building codes. So I'm looking at this from the standpoint, as I talked about
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	both the air-conditioner and the heater.  Q. Okay. Is there any sort of central air-conditioning system at either of these hotels?  A. No. I do not believe so.  Q. And we were talking about Days Inn. Is Rocky Waters Motor Inn also an open atmosphere building?  A. Yes.  Q. Okay. And that also has an attic space?  A. Yes, it does.  Q. Do you have an opinion on the actual probability that wildfire debris in the attic space could resuspend in the air?  A. Yes.  Q. And what is that?  A. Absolutely.  Q. Okay. How would that happen?	6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	Q. When you visited the Rocky Waters Motor Inn and the Days Inn, could you detect any smoke odors?  A. No, I did not. I know that they've cleaned. I mean I know Q. Sure.  A they wiped everything down. So Q. When you visited these hotels, did you go up in the attic?  A. I did not in either case. They had already. Our guys had already done that. They photographed it. I what I look for when I'm there is I'm really looking at these from a building science standpoint. That's one of the concerns that I have with hygienists doing this type of work. Hygienists typically don't understand building science and air movement and building codes. So I'm looking at this from the standpoint, as I talked about in this office, is it possible for particulate from this
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	both the air-conditioner and the heater.  Q. Okay. Is there any sort of central air-conditioning system at either of these hotels?  A. No. I do not believe so.  Q. And we were talking about Days Inn. Is Rocky Waters Motor Inn also an open atmosphere building?  A. Yes.  Q. Okay. And that also has an attic space?  A. Yes, it does.  Q. Do you have an opinion on the actual probability that wildfire debris in the attic space could resuspend in the air?  A. Yes.  Q. And what is that?  A. Absolutely.  Q. Okay. How would that happen?  A. Well, first of all, with regard to soot and char as	6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	Q. When you visited the Rocky Waters Motor Inn and the Days Inn, could you detect any smoke odors?  A. No, I did not. I know that they've cleaned. I mean I know Q. Sure.  A they wiped everything down. So Q. When you visited these hotels, did you go up in the attic?  A. I did not in either case. They had already. Our guys had already done that. They photographed it. I what I look for when I'm there is I'm really looking at these from a building science standpoint. That's one of the concerns that I have with hygienists doing this type of work. Hygienists typically don't understand building science and air movement and building codes. So I'm looking at this from the standpoint, as I talked about in this office, is it possible for particulate from this room to transfer to the next room or the next room, and,
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	both the air-conditioner and the heater.  Q. Okay. Is there any sort of central air-conditioning system at either of these hotels?  A. No. I do not believe so.  Q. And we were talking about Days Inn. Is Rocky Waters Motor Inn also an open atmosphere building?  A. Yes.  Q. Okay. And that also has an attic space?  A. Yes, it does.  Q. Do you have an opinion on the actual probability that wildfire debris in the attic space could resuspend in the air?  A. Yes.  Q. And what is that?  A. Absolutely.  Q. Okay. How would that happen?	6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	Q. When you visited the Rocky Waters Motor Inn and the Days Inn, could you detect any smoke odors?  A. No, I did not. I know that they've cleaned. I mean I know Q. Sure.  A they wiped everything down. So Q. When you visited these hotels, did you go up in the attic?  A. I did not in either case. They had already. Our guys had already done that. They photographed it. I what I look for when I'm there is I'm really looking at these from a building science standpoint. That's one of the concerns that I have with hygienists doing this type of work. Hygienists typically don't understand building science and air movement and building codes. So I'm looking at this from the standpoint, as I talked about in this office, is it possible for particulate from this

	Page 74		Page 76
1	focus on this, was to figure out that distribution.	1	in the report that we've marked as Exhibit 2.
2	Q. Did you do any studies of the airflow through the	2	A. Sure.
3	building?	3	Q. First of all, this is a true and correct copy of your
4	A. No. We didn't do any blower door tests or	4	report as to the Rocky Waters Motor Inn, correct?
5	depressurization of the building. Both of these	5	A. Yes.
6	buildings are old enough, it would have been difficult.	6	Q. And it was Mr. Piero who pulled the samples, right?
7	There's a lot of open bypasses. Yeah.	7	A. He did, yes.
8	Q. Do you know how many cubic feet of air circulate through	8	Q. And you pulled both tape samples and air samples,
9	the attic on any given date?	9	correct?
10	A. No. That would also be dependant on the on the	10	A. Yes.
11	amount of wind that's going on.	11	Q. Does one give you an advantage over the other, tape
12	Q. Did you	12	versus air samples?
13	A. I mean we could do a we did not do an analysis of the	13	A. Well, the air sample is essentially a tape sample.
14	a code analysis of the venting. There are formulas	14	Inside the Air-O-Cell cassette is a is a sticky
15	where you can determine, based on the size of the strip	15	slide. The difference really with the air sample is
16	of venting that's in the soffit, any roof vents that	16	we're trying to get an overview of ambient air within an
17	there are and any gable end vents, and you can determine	17	area, or, when we can't get the tape into the the
18	the cubic feet of attic space, and you can determine	18	block wall, for example, or we can't get the tape up
19	what the airflow is designed for, but that is dynamic	19	into a piece of conduit, we use something called a wall
20	based on wind. Yeah.	20	check sterilized tube to do that, an extension that goes
21	Q. Okay. Did you do any study of the how many cubic	21	onto that Air-O-Cell. So the both both are
22	feet of airflow through the wall cavities in a given	22	certainly used in the industry as a as a pretty
23	day?	23	standard practice.
24	A. We did not.	24	Q. Okay.
25	Q. Do you know if Gatlinburg is EPA compliant in terms of	25	A. Yeah.
	Page 75		Page 77
1	carbon emissions?	1	Q. Is it true that tape lift sampling would give you a
2	A. I do not. And I know there are sites that you can look	2	better indication of the density of particulate matter?
3	at where you can get daily readings on those, but I do	3	A. Yes. Typically we will see the tape lifts will have a
4	not and I did not look at that.	4	higher distribution count on them than the Air-O-Cell.
5	Q. Okay. Let's take a look at Exhibit 2 there. That's	5	Yeah.
6	A. Okay.	6	Q. And it says the sampling was performed by FBS on
7	Q. I believe that's your report on the Rocky Waters'	7	January 4th and 5th of 2018, correct?
8	property, correct?	8	A. Yes.
9	A. Yes.	9	Q. It describes it is as a recent brush fire. Do you see
10	Q. As opposed to the Days Inn?	10	that?
11	A. Yes. And I will I will go on record as saying that	11	A. Yes.
12	it does appear that in the and you'll get this in the	12	Q. Okay.
13	documents, but it does appear that when we reprint with	13	A. I think it was a little more than a brush fire.
14	embedded in here, we reprint Carlson's report.	14	Q. Maybe a little understatement there?
15	Q. Mm-hmm.	15	A. A little understatement.
16	A. All right?	16	Q. Okay.
17	Q. Yes.	17	A. Yes.
18	A. And we reprinted, as we receive it. However, for	18	Q. Suffice to say, at the time you knew you were dealing
19	whatever reason, in both of these, it does not look like	19	with the Gatlinburg wildfires, correct?
20	the pictures that Carlson took are there. I don't know	20	A. Yes.
21	if you've seen those. But he has actual pictures of the	21	Q. Okay. So how long after the actual wildfires was FBS
22 23	underneath the microscope of what he was seeing. So	22	taking these samples?
23	that that appears to not have been reprinted here.  So	23	A. A couple years. A year and-a-half. Q. Okay.
24			- '
25	Q. Okay. All right. I want to ask you about some things	25	A. Yep.

	Page 78		Page 80
1	Q. What are the advantages or disadvantages of taking	1	Q. Okay.
2	samples a year and-a-half after the fact as opposed to	2	A. So
3	shortly after the event?	3	Q. And I will ask him that question. You'd agree with me
4	A. Well, as I said before, with the tape lifts, I don't	4	though that his report does not reference ash?
5	know that it would make a great deal of difference on a	5	A. I would agree with that.
6	vertical surface. Vertical surface. On a horizontal	6	Q. You say, it is my opinion that the brush fire caused
7	surface where you would have settled dust, it would	7	damage to the building through the deposition of
8	change the percentage of char or soot as to the total of	8	carcinogenic soot into hidden wall and ceiling cavities.
9	what you're looking at underneath the microscope because	9	Do you see that?
10	now I've distributed more background dust. With the	10	A. Yes.
11	Air-O-Cell, there's no question it would have an effect	11	Q. Actually, let me ask you this. Does does the amount
12	on the percentage of soot or char that you would see.	12	of wildfire debris that you believe is present at these
13	Q. Would it affect the percentage of soot and char in	13	hotels, does it cause any structural or material change
14	relation to each other?	14	to the to the surfaces on which it sits?
15	A. No.	15	A. The only structural change that we have seen this
16	Q. Okay. In other words, the passage of time would not	16	product, these byproducts cause over time is we have
17	affect the proportion of soot and char relative to each	17	we have seen the electrical the casing on electrical
18	other?	18	wire, we have seen that develop splits.
19	A. Relative to each other. It just	19	Q. Okay.
20	Q. Assuming	20	A. And we've been lucky enough to do sampling and have
21	A. Yeah.	21	cases still going on two to three years later and no
22	Q no intervening event.	22	work being done and go back and relook at things and
23	A. Assuming no intervening event, exactly. It would not	23	pull wire and take close-ups, and it's it's pretty
24	change that. In other words, it doesn't self correct	24	scary actually about what's happening inside the
25	and go away.	25	conduit
	Page 79		Page 81
1	Q. Okay. All right. It says on summary of opinions here,	1	Q. Okay.
2	I have concluded that the property in question located	2	A of some of these buildings later.
3	at 333 Parkway, Gatlinburg, Tennessee 37738 has been	3	Q. Are you aware of whether anyone's performed any
4	damaged by the brush fire through the deposition of soot	4	inspection or examination of the electrical conduits in
5	and ash throughout the attic assemblies, interior	5	either hotel at issue here?
6	partition walls, dropped ceilings, mechanical chase	6	A. They have not. We took tape lifts from the electrical
7	ways, light fixtures and venting. Do you see that?	7	in, I think, a couple of locations.
8	A. Yes.	8	Q. Okay.
9	Q. Okay. You said soot and ash there. Did anyone test for	9	A. Should be in the photos. And all we're doing there is
10	the presence of ash?	10	we're taking a we're taking a junction box cover off
11	A. Carlson always looks for all three of those, and I will	11	and we're just taking a tape lift off the actual wire
12	stipulate that that's a that's a misprint. It should	12	itself.
13	say soot and char. We typically say soot and char or	13	Q. Okay. Do you ever use any laboratory other than N.G.
14	soot/char. We only reference ash if it comes up, and it	14	Carlson Analytical for Level 1 testing?
15	didn't come up in any of his samples.	15	A. No.
16	Q. Okay. Do wildfires produce ash?	16	Q. Okay. The next page lists the it starts a table
17	A. Certainly. You can walk through where the wildfire is	17	there of Mr. Carlson's observations, correct?
18	and you can kick it up. Typically the ash is going to	18	A. Yes.
19	be a white or gray in color. Although, now the	19	Q. And these are Mr. Carlson's observations from looking at
20	literature being published is indicating that now soot	20	the samples under a microscope, correct?
21	is being identified as that same color. So	21	A. Correct.
22	Q. Did Mr. Carlson test for ash?	22	Q. And there is a column there that says Trace density. Do
23	A. You'll have to ask him that question.	23	you see that?
24	Q. Okay.	24	A. Yes.
25	A. I believe he looks for fire related particulate.	25	Q. A column that says Location, right?

	Page 82		Page 84
1	A. Yes.	1	Q. Trace density is listed as light. Do you see that?
2	Q. And, obviously, the location column shows where the	2	A. Yes.
3	sample came from, right?	3	Q. The table below lists it doesn't say light. It says
4	A. Yes.	4	limited or it says negligible.
5	Q. And how is trace density determined, if you know?	5	A. Negligible impact for smoke. Exactly.
6	A. The my understanding and obviously you will ask	6	Q. Okay.
7	him this. But my understanding, when you take a look at	7	A. So
8	the D6603 ASTM standard, on about the ninth or tenth	8	Q. Do you know why the term light is used as opposed to
9	page of that, it shows a diagram of of some circles,	9	negligible?
10	and inside the circles it shows a bunch of dots and some	10	A. The trace density and just a second, if I can. So
11	are white and some are black. And then it shows another	11	just a minute. You'll have to ask him this again.
12	one with more black and less white until it's, you know,	12	Q. Sure.
13	a lot of black and a few white. That is a trace density	13	A. He can answer that question. But my understanding is
14	sample. A person looking at it is mathematically saying	14	the trace density has to do with how much particulate is
15	within the field that I am looking at, this small little	15	on the actual sample. Is it so we will take a tape
16	field, this is the percentage of what I am seeing in	16	lift or an Air-O-Cell. We will take an Air-O-Cell
17	there that I think is related to a fire particulate.	17	sometimes, and you can pick up the Air-O-Cell, and you
18	All right?	18	can look, and you don't see anything in there most of
19	Q. Okay. So, under the first table there on page 3,	19	the time. There are times we'll take it and the
20	there's a you see where it says char and soot-like	20	Air-O-Cell is actually black. Okay. So he may say
21	particle interpretation?	21	that's a very heavy trace density. All right. But
22	A. Yes.	22	within the actual when he actually looks at it, he
23	Q. Okay. Is that the same thing as the ASTM classification	23	may have less than 5 percent char, .05 percent char or
24	standard?	24	and no soot. Meaning, yeah, it's a heavy trace density
25	A. In essence.	25	of particulate, but there's no fire particle in there
	Page 83		Page 85
1	Q. Okay.	1	that he can see.
2		l .	that he can sec.
	A. Yeah.	2	Q. Okay.
3	A. Yeah.  Q. What do you mean in essence?	2	
3 4		l .	Q. Okay.
	Q. What do you mean in essence?	3	Q. Okay.  A. That's my understanding.
4	Q. What do you mean in essence?  A. Well, what Carlson has come up with to determine and	3 4	Q. Okay.  A. That's my understanding.  Q. If you look at  MR. SCOTT: Brian?  MR. DEVILLING: Yeah, Clint.
4 5	Q. What do you mean in essence?  A. Well, what Carlson has come up with to determine and again you'll have to ask him.	3 4 5	Q. Okay.  A. That's my understanding.  Q. If you look at  MR. SCOTT: Brian?
4 5 6 7 8	<ul><li>Q. What do you mean in essence?</li><li>A. Well, what Carlson has come up with to determine and again you'll have to ask him.</li><li>Q. Okay.</li></ul>	3 4 5 6 7 8	Q. Okay.  A. That's my understanding.  Q. If you look at  MR. SCOTT: Brian?  MR. DEVILLING: Yeah, Clint.  MR. SCOTT: Are we at a place we can take a five-minute break?
4 5 6 7 8	<ul> <li>Q. What do you mean in essence?</li> <li>A. Well, what Carlson has come up with to determine and again you'll have to ask him.</li> <li>Q. Okay.</li> <li>A. But we needed to when we delved into this process about seven years with him, we did a number of case studies before we ever decided to utilize it in the</li> </ul>	3 4 5 6 7 8 9	Q. Okay.  A. That's my understanding.  Q. If you look at  MR. SCOTT: Brian?  MR. DEVILLING: Yeah, Clint.  MR. SCOTT: Are we at a place we can take a five-minute break?  MR. DEVILLING: Always.
4 5 6 7 8 9	<ul> <li>Q. What do you mean in essence?</li> <li>A. Well, what Carlson has come up with to determine and again you'll have to ask him.</li> <li>Q. Okay.</li> <li>A. But we needed to when we delved into this process about seven years with him, we did a number of case studies before we ever decided to utilize it in the field. We sampled all different types of wood burns.</li> </ul>	3 4 5 6 7 8 9	Q. Okay.  A. That's my understanding.  Q. If you look at  MR. SCOTT: Brian?  MR. DEVILLING: Yeah, Clint.  MR. SCOTT: Are we at a place we can take a five-minute break?  MR. DEVILLING: Always.  THE WITNESS: Great.
4 5 6 7 8 9 10	<ul> <li>Q. What do you mean in essence?</li> <li>A. Well, what Carlson has come up with to determine and again you'll have to ask him.</li> <li>Q. Okay.</li> <li>A. But we needed to when we delved into this process about seven years with him, we did a number of case studies before we ever decided to utilize it in the field. We sampled all different types of wood burns.</li> <li>We sampled different buildings, brand new construction,</li> </ul>	3 4 5 6 7 8 9 10	Q. Okay.  A. That's my understanding. Q. If you look at  MR. SCOTT: Brian?  MR. DEVILLING: Yeah, Clint.  MR. SCOTT: Are we at a place we can take a five-minute break?  MR. DEVILLING: Always.  THE WITNESS: Great.  MR. SCOTT: Ten, 15 come back?
4 5 6 7 8 9 10 11	<ul> <li>Q. What do you mean in essence?</li> <li>A. Well, what Carlson has come up with to determine and again you'll have to ask him.</li> <li>Q. Okay.</li> <li>A. But we needed to when we delved into this process about seven years with him, we did a number of case studies before we ever decided to utilize it in the field. We sampled all different types of wood burns.</li> <li>We sampled different buildings, brand new construction, areas where we wouldn't ideally find any soot. We</li> </ul>	3 4 5 6 7 8 9 10 11	Q. Okay.  A. That's my understanding. Q. If you look at  MR. SCOTT: Brian?  MR. DEVILLING: Yeah, Clint.  MR. SCOTT: Are we at a place we can take a five-minute break?  MR. DEVILLING: Always.  THE WITNESS: Great.  MR. SCOTT: Ten, 15 come back?  MR. DEVILLING: Sure.
4 5 6 7 8 9 10 11 12 13	<ul> <li>Q. What do you mean in essence?</li> <li>A. Well, what Carlson has come up with to determine and again you'll have to ask him.</li> <li>Q. Okay.</li> <li>A. But we needed to when we delved into this process about seven years with him, we did a number of case studies before we ever decided to utilize it in the field. We sampled all different types of wood burns.</li> <li>We sampled different buildings, brand new construction, areas where we wouldn't ideally find any soot. We sampled things that have been damaged by fires. We had</li> </ul>	3 4 5 6 7 8 9 10 11 12 13	Q. Okay.  A. That's my understanding.  Q. If you look at  MR. SCOTT: Brian?  MR. DEVILLING: Yeah, Clint.  MR. SCOTT: Are we at a place we can take a five-minute break?  MR. DEVILLING: Always.  THE WITNESS: Great.  MR. SCOTT: Ten, 15 come back?  MR. DEVILLING: Sure.  THE WITNESS: Sounds good.
4 5 6 7 8 9 10 11 12 13 14	<ul> <li>Q. What do you mean in essence?</li> <li>A. Well, what Carlson has come up with to determine and again you'll have to ask him.</li> <li>Q. Okay.</li> <li>A. But we needed to when we delved into this process about seven years with him, we did a number of case studies before we ever decided to utilize it in the field. We sampled all different types of wood burns.</li> <li>We sampled different buildings, brand new construction, areas where we wouldn't ideally find any soot. We sampled things that have been damaged by fires. We had to then figure out and he had to figure out how am I</li> </ul>	3 4 5 6 7 8 9 10 11 12 13	Q. Okay.  A. That's my understanding.  Q. If you look at  MR. SCOTT: Brian?  MR. DEVILLING: Yeah, Clint.  MR. SCOTT: Are we at a place we can take a five-minute break?  MR. DEVILLING: Always.  THE WITNESS: Great.  MR. SCOTT: Ten, 15 come back?  MR. DEVILLING: Sure.  THE WITNESS: Sounds good.  MR. DEVILLING: Sounds good.
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4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	<ul> <li>Q. What do you mean in essence?</li> <li>A. Well, what Carlson has come up with to determine and again you'll have to ask him.</li> <li>Q. Okay.</li> <li>A. But we needed to when we delved into this process about seven years with him, we did a number of case studies before we ever decided to utilize it in the field. We sampled all different types of wood burns.</li> <li>We sampled different buildings, brand new construction, areas where we wouldn't ideally find any soot. We sampled things that have been damaged by fires. We had to then figure out and he had to figure out how am I going to quantify that so someone could interpret it and understand it. And this is the interpretation method he has come up with.</li> <li>Q. Okay. So</li> <li>A. All right. That is in discussing this with him, my understanding is that is based on standard industrial hygiene principles for quantifying particulate, whether that would be mold or whether that would be soot.</li> </ul>	3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	Q. Okay.  A. That's my understanding. Q. If you look at  MR. SCOTT: Brian?  MR. DEVILLING: Yeah, Clint.  MR. SCOTT: Are we at a place we can take a five-minute break?  MR. DEVILLING: Always.  THE WITNESS: Great.  MR. SCOTT: Ten, 15 come back?  MR. DEVILLING: Sure.  THE WITNESS: Sounds good.  MR. DEVILLING: Sounds good.  THE VIDEOGRAPHER: And we are going off the record, and the time is 10:45 a.m.  (Break taken at 10:45 a.m 10:53 a.m.)  THE VIDEOGRAPHER: We are back on the record, and the time is 10:53 a.m.  Q. (MR. DEVILLING) Okay. Looking at Exhibit 2, on page 3, in the bottom there where it lists the tape samples, do you see that?
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4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	Q. What do you mean in essence?  A. Well, what Carlson has come up with to determine and again you'll have to ask him.  Q. Okay.  A. But we needed to when we delved into this process about seven years with him, we did a number of case studies before we ever decided to utilize it in the field. We sampled all different types of wood burns.  We sampled different buildings, brand new construction, areas where we wouldn't ideally find any soot. We sampled things that have been damaged by fires. We had to then figure out and he had to figure out how am I going to quantify that so someone could interpret it and understand it. And this is the interpretation method he has come up with.  Q. Okay. So  A. All right. That is in discussing this with him, my understanding is that is based on standard industrial hygiene principles for quantifying particulate, whether that would be mold or whether that would be soot.  Q. Okay. Just, for example then, taking the first entry	3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	Q. Okay.  A. That's my understanding. Q. If you look at  MR. SCOTT: Brian?  MR. DEVILLING: Yeah, Clint.  MR. SCOTT: Are we at a place we can take a five-minute break?  MR. DEVILLING: Always.  THE WITNESS: Great.  MR. SCOTT: Ten, 15 come back?  MR. DEVILLING: Sure.  THE WITNESS: Sounds good.  MR. DEVILLING: Sounds good.  THE VIDEOGRAPHER: And we are going off the record, and the time is 10:45 a.m.  (Break taken at 10:45 a.m 10:53 a.m.)  THE VIDEOGRAPHER: We are back on the record, and the time is 10:53 a.m. Q. (MR. DEVILLING) Okay. Looking at Exhibit 2, on page 3, in the bottom there where it lists the tape samples, do you see that?  A. Yes.

	Page 86		Page 88
1	A. Yes.	1	is he seeing. And he at plus he stops. He's
2	Q. What was the purpose of taking a tape sample from the	2	basically saying there's there's clearly more than
3	wood burning fireplace?	3	that here, but this is but this is going to be a
4	A. The idea, that was done for purposes of secondary lab	4	fairly loaded sample.
5	analysis and some initial lab analysis, if Mr. Carlson	5	Q. Okay. Do you have any explanation for why there was
6	wanted to look at the morphology of the sample within	6	soot of 50 plus in the fireplace at the Rocky Waters
7	the fireplace itself versus the morphology of a sample	7	Motor Inn but no soot in the fireplace at the Days Inn,
8	that was taken somewhere else like up in the attic or	8	Gatlinburg?
9	something like that.	9	A. No, I do not.
10	Q. Okay.	10	Q. Okay. Any explanation for why
11	A. Had we taken this then to a secondary lab for elemental	11	A. Well, let me it could be where Adam took the sample.
12	analysis, what we would have done with that is, one,	12	Q. Okay.
13	confirm that it's, you know, soot and char, but then we	13	A. Potentially. But, no, that that's all I can think
14	would have had the anywhere from 6 to 12 actual	14	of.
15	markers that were within that particular sample. And	15	Q. Okay.
16	then we would have compared it to, say, for example,	16	A. Yeah.
17	number 18 where we have a distribution of char,	17	Q. Do you know what explains the difference though?
18	certainly not as high. But we could compare those two	18	A. In this case, no, not without a deeper level of
19	samples, and, if we had the same or different elements,	19	examination from the lab.
20	then we would have been able to say there's six elements	20	Q. Okay. Similar question, do you know why there's a
21	in number 12. There's nine elements in number 18.	21	difference in the proportion of char to soot between the
22	Those three additional markers are consistent with	22	Days Inn and the Rocky Waters Motor Inn fireplaces that
23	something you would see from a wildfire, not from a	23	were tested?
24	fireplace.	24	A. No. We didn't draw that correlation.
25	Q. Okay.	25	Q. Okay. Let's go back to Exhibit 2 here. What I'd like
	Page 87		Page 89
1	A. We didn't do that.	1	to do is just run down the sample locations and ask you
2	Q. Okay. And, likewise, if you would see the same sort of	2	why each particular location was was chosen.
3	elemental fingerprint in both samples, that might be an	3	A. Sure.
4	indication that the stuff in the attic came from the	4	Q. Okay. So starting with the Room 102, bedroom exterior
5	fireplace?	5	(LE) wall. Do you see that?
6	A. Exactly.	6	A. And this is back to
7	Q. Okay.	7	Q. Exhibit
8	A. Yeah.	8	A Rocky Waters?
9	Q. If you look at Exhibit 3, page 3.	9	Q. Yes, sir.
10	A. Exhibit 3. We're going to switch exhibits.	10	A. Okay.
11	Q. Yeah.	11	Q. Exhibit 2.
12	A. Okay.	12	A. Great.
13	Q. That's the Days Inn report, correct?	13	Q. Do you know why Room 102, bedroom, exterior wall, was
14	A. Yes.	14	chosen as a sample location?
15	Q. And it looks like there was a sample taken from a wood	15	A. Yes. This is and LE means left elevation.
16	burning fireplace in Room 407, correct?	16	Q. Okay.
17	A. Yes.	17	A. So all we're doing is we're going to the left elevation
18	Q. And that one showed charred particles of 50 plus,	18	outside and we're taking a sample. We're when we say
19	correct?	19	at the wall, we're not I'll just take a look. Let me
20	A. Yes.	20	just take a look at his photos on this one. A sample
21	Q. And by the way, the number of particles, are those just	21	number 1. This is sample number 2. Sample 2. Okay.
2.2	individual particles?	22	So, yeah. So that would be memorialized on page 5 of 63
22		l .	
23	A. Yes. He's counting on the just like you do with	23	on the photo logs behind you.
		23 24 25	on the photo logs behind you.  So what he's done is he's popped a hole the size of a pen in this wall right here, and he's putting a

	Page 90		Page 92
1	sterilized tube in there and he's sucking air out of	1	wall for wiring or anything else.
2	that wall	2	Q. Do you know if there was any insulation in there just
3	Q. Okay.	3	for noise purposes?
4	A basically. That's all he's doing. Yeah.	4	A. There wasn't, and I can tell you that based on the
5	Q. That was my question. Is the air coming from the wall	5	the 30 liters that we took. So, as soon as we drill
6	cavity or from the outside?	6	that hole, you can look at the end of that, and, if
7	A. No. It's coming from the actual wall cavity itself. So	7	there's insulation on the end of it, then we run our
8	we assume the wall cavity is 14 inches wide between the	8	Air-O-Cell cassettes for one minute.
9	studs, which would be standard framing construction. We	9	Q. Okay.
10	assume it's three and-a-half inches thick, and we assume	10	A. This is indicating a five-minute sample. Okay. So much
11	that it's eight feet tall.	11	much longer sample. There's no no insulation in
12	Q. Okay.	12	there.
13	A. So we could calculate the amount of cubic air that's in	13	Q. Do you know whether the wall cavity that was tested
14	there. However, what we don't know at that point,	14	there at Room 104 was sealed from other wall cavities?
15	because we haven't gutted, we don't know if there's a	15	A. We do not.
16	wire hole through the top, if there's wire. We don't	16	Q. Do you know if it was sealed off from the attic?
17	know if it's interconnected. We know nothing about that	17	A. We do not.
18	wall in terms of its assembly because we haven't gutted	18	Q. How about Room 105, bathroom, dropped ceiling?
19	it open. So we're literally doing a grab sample in this	19	A. So in this particular hotel they have the Sheetrock
20	location to say what's happening at that point in time	20	ceilings in the main rooms, and then it drops down about
21	at that location today.	21	four feet inside the room to a suspended ceiling that
22	Q. So as to the Room 102 bedroom exterior, left elevation	22	goes across the outside hallway and goes across then
23	wall, do you know if that wall cavity was exposed to the	23	into the other unit across the hall. And so you have,
24	wildfire debris?	24	going down the middle of the the whole area, you have
25	A. Well, the exterior of the building certainly was. So,	25	the attic and then you have this plenum or dropped area,
	Page 91		Page 93
1	if there is any opening in that wall or if it is if	1	just like this, below the attic. And that is that
2	it connects internally to any of the other wall	2	goes from one end of the hotel to the other. That's
3	assemblies, then it could potentially have exposure.	3	completely there's no separation of that at all.
4	Q. Okay.	4	G-
5			So
	A. Yeah.	5	Q. That was my next question.
6	A. Yeah.  Q. And it sounds like we would need to gut the wall to get		
6 7		5	Q. That was my next question.
	Q. And it sounds like we would need to gut the wall to get	5 6	Q. That was my next question.  A. Yeah.
7	Q. And it sounds like we would need to gut the wall to get a final	5 6 7	<ul><li>Q. That was my next question.</li><li>A. Yeah.</li><li>Q. Is there when you say there's no separation at all.</li></ul>
7 8 9 10	Q. And it sounds like we would need to gut the wall to get a final  A. Correct.	5 6 7 8	<ul><li>Q. That was my next question.</li><li>A. Yeah.</li><li>Q. Is there when you say there's no separation at all.</li><li>Are you talking about separation between the attic and</li></ul>
7 8 9	Q. And it sounds like we would need to gut the wall to get a final  A. Correct.  Q determination on that. All right. So Room 104, bathroom vanity, interior dividing wall is the next sample. Why was that location chosen?	5 6 7 8 9	<ul> <li>Q. That was my next question.</li> <li>A. Yeah.</li> <li>Q. Is there when you say there's no separation at all.</li> <li>Are you talking about separation between the attic and the dropped ceiling area?</li> <li>A. Correct. No. There's a there's a separation between the attic and the dropped ceiling. I'm sorry. But</li> </ul>
7 8 9 10 11	Q. And it sounds like we would need to gut the wall to get a final  A. Correct.  Q determination on that. All right. So Room 104, bathroom vanity, interior dividing wall	5 6 7 8 9 10 11 12	<ul> <li>Q. That was my next question.</li> <li>A. Yeah.</li> <li>Q. Is there when you say there's no separation at all.</li> <li>Are you talking about separation between the attic and the dropped ceiling area?</li> <li>A. Correct. No. There's a there's a separation between the attic and the dropped ceiling. I'm sorry. But there is no separation between one end of that and the</li> </ul>
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	Page 94	Page 96
1	penetrations that went up into the attic. They were all	1 fiberglass insulation in it. So two different types of
2	open bypasses.	2 insulation.
3	Q. Okay.	3 Q. There's a note here in the fourth column on some of
4	A. So air would move and distribute easily back and forth	4 these where it says, Light Asp/Pen
5	between the attic and this area.	5 <b>A. Yes.</b>
6	Q. How about Room 114, bedroom? That's sample number 5.	6 Q like. Asp/Pen like. What is that notation?
7	A. Bedroom, east wall.	7 A. Aspergillus, penicillium. So that's where Carlson is
8	Q. Why was that location chosen?	8 saying, again, I identified four concerning molds,
9	A. Again, just what we tried to do is we tried to skip, we	9 aspergillus, penicillium being one of them. He's just
10	tried to just randomly pick different rooms. We're just	saying, oh, by the way, I'm also seeing a light
11	looking for a distribution pattern.	11 distribution of aspergillus aspergillus, penicillium.
12	Q. How about well, were any of the remaining locations	12 Q. Okay. And that would that would have no relationship
13	in samples 6, 7, 8, 9, 10, 11, 13, 14 or 17 chosen for	13 whatsoever to wildfire?
14	any purpose other than just finding random areas to test	14 A. No. The only reason this would pop up is if somebody
15	in?	15 were spraying water on the building to try and douse it
16	A. Well, 13 was because within the drop ceiling area, when	down, to keep it from burning. Okay. That might be a
17	we opened it up, we saw the CMU wall there. We saw that	17 possibility.
18	the CMU wall had openings into it and that it went up	18 Q. Okay. Oh, and, by the way, I meant to ask you earlier,
19	into the attic and that it's open at the top. So	19 in either of these buildings did you see any evidence of
20	anything in the attic is going to dump into that CMU	20 direct fire damage as opposed to just smoke residue
21	wall. So we tested in that CMU wall specifically to see	21 damage?
22	what was going on. The difference between our test and	22 A. No.
23	this sample 13 is not and I don't have their file in	23 Q. Okay. What did you know about the cleaning that had
24	front of me, but it's not necessarily the same location	24 been done at the hotel prior to the air sampling that
25	that Medina tried to sample inside the wall. The	25 FBS did on January 4th and 5th of 2018?
	Page 95	Page 97
1	difference is he took an air hose and he tried to create	1 A. My understanding is is that they pressure washed the
2	an aggressive ambient sample inside there, with results	2 outside of the building. May have pressure washed it.
3	that couldn't be read by the lab. We just put the hose	3 That's what we were told. My understanding was that
4	in there and pulled out the particulate.	4 they had staff wipe down and vacuum and clean, actually
5	Q. Okay. Without without for lack of a better term,	5 deep clean all of the carpets. They replaced I think
6	without stirring it up?	6 this is the hotel. Maybe it was both. They replaced
7	A. Exactly. Without mixing it up and stirring it up, and	7 some mattresses. I don't know how many. Washed all of
8	we got a pretty high reading. So that told us that	8 the bedding, but it was pretty much a surface wipe-down
9	there was some stuff being distributed down in there.	9 of the visible surfaces that they could see.
10	And the attic spaces were simply one side of the attic	10 Our our position is is that the surface this
11	and the other side of the attic.	11 wall right over here to my right, I can see a visible
12	Q. Okay.	12 surface. There's also a surface behind that, which is
13	A. All right. Or one in the middle, one halfway down that.	the one you can't see. So none of those surfaces were
14	Q. Was the attic accessed through, you know, from	14 wiped or cleaned because they couldn't access them.
15	underneath, through the ceiling, or did you go up in the	15 Q. Okay.
16	attic?	A. The attic insulation, I believe, is the same insulation
17	A. There's a side door.	17 that was there at the time of the fire.
18	Q. All right.	18 Q. Are you
19	A. I believe on the side of the building, an access panel.	19 A. The only if I can, the only anomaly there was that
20	Just a second. I got to remember it. Because one of	20 one building had the pink insulation and one had the 21 white insulation. So at some point in time there was a
21	the attics had yeah, it's a side door. So that would be page 57, Figure 114, attic space entry. And there's	21 white insulation. So at some point in time there was a 22 different insulation that was put in there, but I don't
22 23	one for each building. One of the attic assemblies had	23 know when.
24	a product called InsulSafe 3 insulation that had been	24 Q. Are you aware of whether a professional cleaning service
25	blown in. And the other attic had a fiberglass, red	25 or a professional restoration company was ever used at
	and and a modification red	and a second design of the sec

l	Page 98		Page 100
1	either of these hotels?	1	Q. Okay. And this might be a better question for
2	A. I'm not aware of that.	2	Mr. Carlson. But do you know the surface area that's
3	Q. All right. So back let's go to the tape samples	3	actually examined under a microscope?
4	there on Exhibit 2. We already talked about the wood	4	A. I do, but I can't recall.
5	burning fireplace.	5	Q. Okay.
6	A. Yes.	6	A. And I think the issue there is and it's interesting
7	Q. It looks like sample number 12 was another tape lift	7	because the you're looking at a slide. All right.
8	from a wood burning fireplace, correct?	8	But you're honing in on a section of that slide, and
9	A. Yes.	9	you're moving that slide around basically. You're
10	Q. Same reason that for selecting that location?	10	looking at various fields, and so what I can't answer
11	A. Yes. We have done enough we have done enough of this	11	for you is that field study that he did. He'll have to
12	that we know whenever there is a wood burning fireplace	12	answer that for you.
13	of any kind at a facility or a house that has had a	13	Q. Okay.
14	fire, one of the arguments that is always put forth,	14	A. How is that determined. Is this representative of the
15	which would makes sense, is that anything you're finding	15	entire slide, for example.
16	is from the wood fireplace. So you have to sample that	16	Q. Mm-hmm. Do you know what how many square millimeters
17	fireplace as a as a baseline for comparisons.	17	there are in the adhesive portions of the tape that you
18	Q. All right. And then we've got three tape samples taken	18	used or that Mr. Piero used?
19	from attic spaces, correct?	19	A. Yeah. Well, the tape is half inch Scotch clear tape,
20	A. Yes.	20	and he typically I mean you can see it in the photos.
21	Q. Okay. Any particular reason for selection of the attic	21	We typically tear off a piece about five inches long.
22	spaces?	22	We fold over an area for holding, and then we basically
23	A. Basically start at one end, go to the middle, go to the	23	lay it on there and pull it up. So you would be
24	other end. Just here's the distribution.	24	half-inch by three-inch would be the area.
25	Q. Okay.	25	Q. Okay .
	Page 99		Page 101
1	Page 99  A. You know.	1	Page 101  A. And not all of that necessarily. And we don't
1 2	-	1 2	-
	A. You know.		A. And not all of that necessarily. And we don't
2	A. You know.  Q. Did you take any tape samples from any surfaces inside	2	A. And not all of that necessarily. And we don't contrary to I read a one one of the reports
2	A. You know.     Q. Did you take any tape samples from any surfaces inside rooms, other than the fireplaces?	2	A. And not all of that necessarily. And we don't contrary to I read a one one of the reports that was issued for Travelers, a rebuttal report, they
2 3 4	A. You know.     Q. Did you take any tape samples from any surfaces inside rooms, other than the fireplaces?     A. No.	2 3 4	A. And not all of that necessarily. And we don't contrary to I read a one one of the reports that was issued for Travelers, a rebuttal report, they intimate that we, you know, pressed down on the tape.
2 3 4 5	A. You know.  Q. Did you take any tape samples from any surfaces inside rooms, other than the fireplaces?  A. No.  Q. Why not?	2 3 4 5	A. And not all of that necessarily. And we don't contrary to I read a one one of the reports that was issued for Travelers, a rebuttal report, they intimate that we, you know, pressed down on the tape. We didn't do that. One of the problems with pressing
2 3 4 5 6	A. You know.  Q. Did you take any tape samples from any surfaces inside rooms, other than the fireplaces?  A. No.  Q. Why not?  A. The rooms had been thoroughly cleaned. What we were	2 3 4 5 6	A. And not all of that necessarily. And we don't contrary to I read a one one of the reports that was issued for Travelers, a rebuttal report, they intimate that we, you know, pressed down on the tape. We didn't do that. One of the problems with pressing physically down is that you will actually squash the
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	Page 102	Page 104		
1	are expecting that to register char and/or soot or both.	1	A. I don't think we looked at that in this case. The	
	. Under methods here on page 4, it says, no chemical	2	construction certainly looks, you know, circa 1970s.	
3	identification was conducted on the soot-like, char-like	3	Q. How about the Days Inn? Do you know how old that hotel	
4	particles, and carbon black-like particles.	4	is?	
5	Is that basically what we've been talking about is	5	A. Probably similar. Yeah.	
6	the difference between the Level 1 and the Level 4 lab	6	Q. So, if you just if you went into an attic space in a	
7	analysis?	7		
	. Yes.	8	in an older building like that, you would expect to	
		9	find a lot of dust in there, correct?  A. Yes.	
10	e. All right. And it says, presumptive identification was	10		
	based on particle morphology.		Q. And, you know, if you just took a tape sample of just a	
11	What is your definition of the word morphology?	11	dusty surface that hadn't been cleaned for I guess	
	. It's the size of what it looks like under the	12	that'd be 40, 50 years, what what are all the things	
13	microscope. Yeah.	13	that you would expect to see in that sample?	
-	. As opposed to like chemical composition?	14	A. Well, we did that as part of the case study that we	
	Correct.	15	worked on for about two years, Carlson and I, before we	
_	P. Right. And why does it say presumptive identification?	16	started utilizing this in the field. We we sampled	
	. As I indicated earlier in my testimony, based on	17	I owned a house that was, at that point in time,	
18	education, training and experience, the microscopist is	18	140 years old, in St. Paul, Minnesota, a historic house.	
19	looking underneath and they are identifying what they	19	We did sampling there. They had actually had a fire in	
20	believe they are seeing.	20	the house back in the '60s. So we sampled that house.	
	. All right. Then on the next page, page 5, it begins	21	We sampled other people that we knew. We sampled 1940s	
22	section 3, Sampling Discussion. Do you see that?	22	houses, 1970s houses, buildings of all kinds, things at	
23 <b>A</b>	. Yes.	23	the University of Minnesota where he works.	
-	. And this is a part this is something that you're	24	What we were really looking at is the morphology.	
25	writing now in the report, correct?	25	What we were finding in the older houses is that there	
	Page 103		Page 105	
1 <b>A</b> .	. Yes, it is.	1	was so much buildup of dust that you literally couldn't	
2 Q.	. Okay. The previous the table for Mr. Carlson, that	2		
3	was cut and pasted into your report, correct?	١ ۾	see. You couldn't pick out necessarily if there was	
4 <b>A</b> .	. Yes. And I want to go back on record as indicating that	3	see. You couldn't pick out necessarily if there was pollutants that were related to industrial pollution,	
	. Tes. And I want to go back on record as indicating that	4		
5	I mentioned five minutes on our Air-O-Cells. Our		pollutants that were related to industrial pollution,	
		4	pollutants that were related to industrial pollution, char, or soot. The that's why if you take a look at	
6	I mentioned five minutes on our Air-O-Cells. Our	4 5	pollutants that were related to industrial pollution, char, or soot. The that's why if you take a look at the samples that we took in the attic just a second.	
6 7	I mentioned five minutes on our Air-O-Cells. Our Air-O-Cells were all run for two minutes in the walls,	4 5 6	pollutants that were related to industrial pollution, char, or soot. The that's why if you take a look at the samples that we took in the attic just a second.  I'll look at something real quick. So just a minute.	
6 7 8 Q.	I mentioned five minutes on our Air-O-Cells. Our Air-O-Cells were all run for two minutes in the walls, and they were run for five minutes in the attic.	4 5 6 7	pollutants that were related to industrial pollution, char, or soot. The that's why if you take a look at the samples that we took in the attic just a second.  I'll look at something real quick. So just a minute.  Yeah. That's why when you look at this is why it's	
6 7 8 Q.	I mentioned five minutes on our Air-O-Cells. Our Air-O-Cells were all run for two minutes in the walls, and they were run for five minutes in the attic.  Any reason for running them different times in different	4 5 6 7 8	pollutants that were related to industrial pollution, char, or soot. The that's why if you take a look at the samples that we took in the attic just a second.  I'll look at something real quick. So just a minute.  Yeah. That's why when you look at this is why it's when you look at 16 and you look at 18, okay, one is	
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	Page 106	Page 108
1	Sometimes the mold has we call it sooty mold. It	1 Q. Okay.
2	actually has char and/or soot on top of the mold. You	2 A. Then I would go into the wall and I would do a
3	will see potentially you'll be able to see sand or	3 two-minute or a one-minute, depending on if it's
4	quartz, depending on the magnifying, in this level of	4 insulated or not. In the ceiling above me, I probably
5	sampling. That's about it. You're not going to get	5 would do a five minutes because unless there's
6	much more than that.	6 insulation up there.
7	Q. Any inorganic material?	7 O. And are the ambient air samples collected to establish
8	A. You might. You might be able to see some of that.	8 sort of a baseline?
9	Q. Okay.	9 A. Yes. What's in the air at that point in time.
10	A. Yep.	10 Q. Where were ambient air samples taken in this case?
11	Q. So back to your sampling discussion. First paragraph	11 A. Ambient air samples were taken just a second. In the
12	starts, typically, in post fire remediation strategies.	12 attic. Just a minute. Look at the Well, I would
13	Do you see that?	13 consider for anything that was done in the drop
14	A. Yes.	14 ceiling to be an ambient because of the large plenum
15	Q. Okay. There's a comment in there that post remediation	15 that existed up there. It's a it's a large area.
16	complaints from building occupants often include	16 We ran them for two minutes because of the concern
17	descriptions of a lingering smoke smell months and years	of overloading. We still got the results we got.
18	later. Do you see that?	18 Q. Because it's a smaller space?
19	A. Yes.	19 A. Well, no. It's a big space, but it's going to have
20	Q. All right. That's that's something you say typically	20 potentially a lot more dust and things like you have up
21	happens, correct?	21 there because it's not wiped down. So we didn't want to
22	A. Yes.	22 overload it, and then the attic. So really those are
23	Q. All right. Do you know of specific complaints here?	23 those are the ambients that we did. We did not do an
24	A. I don't. For that to happen, you have to have the unit	24 outside sample.
25	completely shut down usually for about 48 hours without	25 Q. Okay. Then why did you not do an outside sample?
	Page 107	Page 109
	Patte 107	
	Page 107	
1	any conditioned air going into it, and then, when you	1 A. We considered the interior open spaces that we did to be
2	any conditioned air going into it, and then, when you open that door and you also have that change in	1 A. We considered the interior open spaces that we did to be 2 representational of the outside, particularly attic.
2	any conditioned air going into it, and then, when you open that door and you also have that change in humidity, is when that off-gassing will occur. So, if	1 A. We considered the interior open spaces that we did to be 2 representational of the outside, particularly attic. 3 Whatever's happening outside is going to be happening in
2 3 4	any conditioned air going into it, and then, when you open that door and you also have that change in humidity, is when that off-gassing will occur. So, if that condition hasn't happened at this facility, then	1 A. We considered the interior open spaces that we did to be 2 representational of the outside, particularly attic. 3 Whatever's happening outside is going to be happening in 4 that attic based on how it's vented
2 3 4 5	any conditioned air going into it, and then, when you open that door and you also have that change in humidity, is when that off-gassing will occur. So, if that condition hasn't happened at this facility, then you wouldn't smell it.	1 A. We considered the interior open spaces that we did to be 2 representational of the outside, particularly attic. 3 Whatever's happening outside is going to be happening in 4 that attic based on how it's vented 5 Q. Okay.
2 3 4 5 6	any conditioned air going into it, and then, when you open that door and you also have that change in humidity, is when that off-gassing will occur. So, if that condition hasn't happened at this facility, then you wouldn't smell it.  Q. Okay. In terms of that Asp/Pen, do you know if	1 A. We considered the interior open spaces that we did to be 2 representational of the outside, particularly attic. 3 Whatever's happening outside is going to be happening in 4 that attic based on how it's vented 5 Q. Okay. 6 A at that point in time.
2 3 4 5 6 7	any conditioned air going into it, and then, when you open that door and you also have that change in humidity, is when that off-gassing will occur. So, if that condition hasn't happened at this facility, then you wouldn't smell it.  Q. Okay. In terms of that Asp/Pen, do you know if  Mr. Carlson ever quantified the number of mold particles	1 A. We considered the interior open spaces that we did to be 2 representational of the outside, particularly attic. 3 Whatever's happening outside is going to be happening in 4 that attic based on how it's vented 5 Q. Okay. 6 A at that point in time. 7 Q. Did you do any ambient air samples in room spaces or
2 3 4 5 6 7 8	any conditioned air going into it, and then, when you open that door and you also have that change in humidity, is when that off-gassing will occur. So, if that condition hasn't happened at this facility, then you wouldn't smell it.  Q. Okay. In terms of that Asp/Pen, do you know if Mr. Carlson ever quantified the number of mold particles that he saw in some of the samples?	1 A. We considered the interior open spaces that we did to be 2 representational of the outside, particularly attic. 3 Whatever's happening outside is going to be happening in 4 that attic based on how it's vented 5 Q. Okay. 6 A at that point in time. 7 Q. Did you do any ambient air samples in room spaces or 8 lobby spaces?
2 3 4 5 6 7 8	any conditioned air going into it, and then, when you open that door and you also have that change in humidity, is when that off-gassing will occur. So, if that condition hasn't happened at this facility, then you wouldn't smell it.  Q. Okay. In terms of that Asp/Pen, do you know if Mr. Carlson ever quantified the number of mold particles that he saw in some of the samples?  A. No. It doesn't look like he did in this case. I will	1 A. We considered the interior open spaces that we did to be 2 representational of the outside, particularly attic. 3 Whatever's happening outside is going to be happening in 4 that attic based on how it's vented 5 Q. Okay. 6 A at that point in time. 7 Q. Did you do any ambient air samples in room spaces or 8 lobby spaces? 9 A. No.
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2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	any conditioned air going into it, and then, when you open that door and you also have that change in humidity, is when that off-gassing will occur. So, if that condition hasn't happened at this facility, then you wouldn't smell it.  Q. Okay. In terms of that Asp/Pen, do you know if Mr. Carlson ever quantified the number of mold particles that he saw in some of the samples?  A. No. It doesn't look like he did in this case. I will tell you that his standard process with me over the years has been, if there is a concern from a mold standpoint, he always calls me and he says we got a problem, and then it shows up where he will actually do a count. Here, there was no indication of that.  Q. Okay. The fourth paragraph down it says, the ambient air samples are collected for a five-minute sample	1 A. We considered the interior open spaces that we did to be 2 representational of the outside, particularly attic. 3 Whatever's happening outside is going to be happening in 4 that attic based on how it's vented 5 Q. Okay. 6 A at that point in time. 7 Q. Did you do any ambient air samples in room spaces or 1 lobby spaces? 9 A. No. 10 Q. Why not? 11 A. Those had all been wiped and cleaned. 12 Q. Okay. 13 A. We were really our assignment here was really to look 14 at Travelers had already agreed to wipe the place 15 down, and that had been that had been done. So we 16 were really looking at the areas that were not affected
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	Page 110		Page 112
1	A. Yep.	1	A. Yeah. It's better for the hygienist to answer that
2	Q. Report on Carcinogens, 12th Edition, correct?	2	question.
3	A. Yes.	3	Q. Okay. Do you know if there are PAHs in non-gas-phase
4	Q. And that's up to 14th Edition now?	4	soots?
5	A. Yep.	5	A. Based on the literature I read, yes.
6	Q. All right. It says, soot is a general term that refers	6	Q. Okay. Can you point me to any specific literature?
7	to the black, impure carbon particles resulting from the	7	A. No. I referenced a whole bunch before, but, again,
8	incomplete combustion of a hydrocarbon, correct?	8	without having those in front of me, no.
9	A. It is.	9	Q. Fair enough.
10	Q. And then it says, it is more properly restricted to the	10	A. No.
11	product of the gas-phase combustion process but is	11	Q. Okay. Then we go to your conclusions. Well, actually,
12	commonly extended to include the residual pyrolyzed fuel	12	let me ask you this. There was a in some of the
13	particles such as cenospheres, charred wood, petroleum	13	materials that I received last night there was a
14	coke, etcetera, that may become airborne during	14	publication titled, Report on Carcinogens, 14th Edition.
15	pyrolysis and which are more properly identified as	15	A. Mm-hmm.
16	cokes or chars.	16	Q. Correct?
17	Can you put that in laymen's terms for me?	17	A. Yes.
18	A. Yeah. Char is a problem. Cokes char is a problem	18	Q. What is that publication?
19	and soot is a problem. And what I think this this is	19	A. Well, that's one of the referenced documents that we
20	a I don't think this is the complete reprint. So you	20	utilize. And
21	may want to check on there, but I do believe there's	21	Q. Is that put out by the National Institutes of Health?
22	another paragraph that goes with it that indicates	22	A. Yes.
23	there's that they talk about the size of the	23	Q. All right. Just ask you about some of the statements in
24	particles. And they and the concerning part is	24	there. If if you don't know, I can ask Mr
25	things that are 10 microns in size or less, because that	25	Mr. Carlson. But there's a statement in there that says
	Page 111		Page 113
1	your lungs are a natural HEPA filter. That's why	1	soots are classified into four morphologically distinct
2	we're all alive and not dead. Okay. So they they	2	forms. One, acini form carbon; two, carbonaceous
3	filter out particulate that is bigger than bigger	3	xerogel particles; three, carbon cenospheres; and, four,
4	than that size. So we are that median that we're	4	coke and char fragments.
5	sampling with, that Air-O-Cell cassette is designed to	5	A. Yes.
6	sample material that is 10 microns or less in size.	6	Q. Do you know what forms of soot we're dealing with in
7	That's what we're looking for, the stuff you can't see,	7	this case, or what forms of soot Mr. Carlson observed?
8	because it will enter into your lungs. And that's what	8	A. You'll have to ask him that.
9	that's what Carlson is also looking for when he's	9	Q. Fair enough.
10	looking under the microscope at the tape lifts.	10	A. If I had his photos in front of me, I might be able to
11	Q. What is the gas-phase combustion process?	11	identify under the microscope, based on having looked at
12	A. Burning. It's called the burning process. That's where	12	these so many times, but, again, that's a better
13	you're going to see that's the smoke that's coming .	13	question for him.
14	out.	14	Q. Okay.
15	Q. The wildfire debris that's there now, is that in the	15	A. Yeah. He identified them.
16	gas-phase combustion process?	16	Q. Do you agree with the statement that soots are black
17	A. No. O. Okay.	17	particulate matter formed as byproducts of combustion or
18 19	Q. Okay.  A. It would still be burning if it was in the gas-phase	18 19	pyrolysis of organic materials such as coal, wood, fuel oil, waste oil, paper or plastics and household refuse?
20	combustion process.	20	A. At the time of the 12th Edition, 2011, I would agree
21	Q. That's what I assumed. Okay.	20	with that. I don't know what edition you're reading or
22	It talks about polycyclic aromatic hydrocarbons.	22	if they have updated that. Based as I said earlier,
23	What are those?	23	based on some of the new literature that's being
	A. PAHs.	24	published, soot is now also being put into a white
24			,
24 25	Q. If you know.	25	and/or a gray form as well. So the idea that soot is

	Page 114		Page 116
1	only black is now changing and evolving.	1	other material on the tape?
2	Q. Okay.	2	A. No, not in this level.
3	A. Yeah.	3	Q. These are just raw particle counts, correct?
4	Q. So, other than the description of soot as black	4	A. Yes.
5	particulate matter, do you agree with the statement I	5	Q. Regardless of whether there's, you know, one mold spore
6	just read?	6	also on the tape or 500 mold spores also on the tape,
7	A. Yes.	7	correct?
8	Q. Okay. Do you agree with the statement that the chemical	8	A. Correct. And you could so, for example, on the
9	compositions of soot and I'm sorry. Let me strike	9	photos that he has published, even today he could look
10	that.	10	at one of those photos, and in front of you he could
11	Do you agree with the statement that their chemical	11	quantify, based on that photo, what, as a hygienist, he
12	compositions and properties are highly variable and	12	is seeing. And he could tell you, yeah, here's a mold
13	depend on the type of starting material and the	13	spore. This is this is here's a skin flake.
14	combustion conditions?	14	Here's a you know, he could certainly do that, and
15	A. Absolutely.	15	those are those show up on the photos.
16	Q. Okay. Do you agree with the statement that particulate	16	Q. Okay.
17	emissions from fireplaces consist largely of aciniform	17	A. Yeah.
18	carbon?	18	Q. I do have his reports here with photos, but
19	A. Absolutely.	19	unfortunately I just have them with black and white.
20	Q. Do you agree with the statement, the general population	20	Would those be of any use to you
21	potentially is exposed to soots from fireplaces,	21	A. Sure. Absolutely.
22	furnaces, engine exhaust and particulate emissions from	22	Q to look at in black and white?
23	any combustion source?	23	A. You bet.
24	A. Yes.	24	Q. Okay. Well, let me ask you this. Is there anything
25	Q. Do you agree with the statement that chimney sweeps	25	that I've asked you today that you have not been able to
	Page 115		Page 117
			rage 117
1	likely have the highest occupational exposure to soots?	1	answer that you would want to look at the photographs to
1 2	likely have the highest occupational exposure to soots?  A. Yeah. It's based on the study done in the 1800s, and	1 2	_
			answer that you would want to look at the photographs to
2	A. Yeah. It's based on the study done in the 1800s, and	2	answer that you would want to look at the photographs to answer?
2	A. Yeah. It's based on the study done in the 1800s, and that has been I think it's one of the things we	2	answer that you would want to look at the photographs to answer?  A. No.
2 3 4	A. Yeah. It's based on the study done in the 1800s, and that has been I think it's one of the things we reference in our in our larger reports, but, yes.	2 3 4	answer that you would want to look at the photographs to answer?  A. No.  MR. DEVILLING: Okay. Off the record.
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	Page 118		Page 120
1	Q. (MR. DEVILLING) Do you have formal training as a	1	A. I don't think I've seen his estimate.
2	scientist?	2	Q. Okay.
3	A. No.	3	A. I certainly could do that, but I haven't seen it.
4	MR. SCOTT: Object to the form.	4	Q. Back to your CV. In any of the training or testing or
5	MR. DEVILLING: Let's take a five-minute	5	any of the licenses or certifications listed, was there
6	break.	6	anything specific to wildfires?
7	THE VIDEOGRAPHER: We are going off the	7	A. Not specific to wild well, just a second. I want to
8	record, and the time is 11:39 a.m.	8	take a look at something here. Just a minute. No, not
9	(Break taken at 11:39 a.m 11:45 a.m.)	9	specific to wildfires. More specific to, you know,
10	THE VIDEOGRAPHER: We are back on the	10	design of buildings, open atmosphere, air movement in
11	record, and the time is 11:45 a.m.	11	buildings, and certainly how to sample, how to gather
12	Q. (MR. DEVILLING) Okay. Mr. Irmiter, I want to talk a	12	samples.
13	little bit about some more conclusions here in	13	Q. Okay.
14	Exhibit 2. It says based on the results of the	14	A. Yeah.
15	sampling. Do you see that paragraph?	15	Q. Have you ever attempted to become a certified industrial
16	A. Which page please?	16	hygienist?
17	Q. Page 6.	17	A. No.
18	A. Yes.	18	Q. Have you ever failed any licensing exams?
19	Q. And it says, based on the results of the sampling, and	19	A. No.
20	then you go on to issue some recommendations?	20	Q. Do you know what the term aciniform means?
21	A. Yes.	21	A. Yeah.
22	Q. All right. And what was your understanding of how	22	Q. I've used it a couple times in questions. What does
23	Mr. Howarth was going to use your report?	23	that term mean?
24	A. My understanding is that this was an appraisal when we	24	A. It's a it's one of the it's the type of
25	were retained. I was going to be going to an appraisal	25	particulate that is distributed with a burn from the
	Page 119		Page 121
1	potentially. I don't know if it had been named yet or	1	fire. Typically it's going to be a carbon. It's going
2	not. My understanding is, is that we would issue	2	to if we tested the aciniform itself, so on that
3	depending on our results, I would issue recommendations,	3	on that particular sample, if if a lab doing Level 4
4	and then those recommendations would be taken by one of	4	were to pinpoint that particular aciniform under the
5	his staff or him, and they would put together an	5	microscope and then break it down chemically, we would
6	Xactimate estimate.	6	expect the highest distribution of the element to be
7	Q. Okay.	7	carbon.
8	A. Based on that. Now, we do Xactimate estimates for every	8	MR. DEVILLING: I'm just looking back
9	one of our clients. We now do them for Mr. Howarth. We	9	through my notes here, Clint.
10	didn't at this point in time. So	10	MR. SCOTT: Okay.
11	Q. Okay. That was my next question.	11	Q. (MR. DEVILLING) Did you ever make any determination of
12	A. Yeah.	12	how often the fireplaces were used at either of these
13	Q. You've never done an Xactimate estimate yourself in this	13	hotels?
14	case, correct?	14	A. No.
15	A. You know, as I sit here today, not that I'm aware of.	15	Q. Did you ever make a determination of how often outdoor
16	Q. Okay.	16	fire pits would have been used at the hotels?
17	A. And if it's not in the documents we sent you, then it	17	A. No.
	de coult aviet	18	Q. Do you have any pre-loss baseline testing from either of
18	doesn't exist.	1	these hotels?
	Q. It was it was not. So	19	
18		19 20	A. No.
18 19	Q. It was it was not. So		
18 19 20	Q. It was it was not. So  A. Okay.	20	A. No.
18 19 20 21	Q. It was it was not. So  A. Okay.  Q. Okay.	20 21	A. No. Q. Okay. From anywhere in Gatlinburg?
18 19 20 21 22	Q. It was it was not. So  A. Okay.  Q. Okay.  A. Yeah, it just yeah, we did not.	20 21 22	A. No. Q. Okay. From anywhere in Gatlinburg? A. No.
18 19 20 21 22 23	Q. It was it was not. So  A. Okay. Q. Okay.  A. Yeah, it just yeah, we did not. Q. All right. Have you ever have you ever done a	20 21 22 23	A. No. Q. Okay. From anywhere in Gatlinburg? A. No. Q. And what what would pre-loss baseline testing what

	Page 122		Page 124
1	information as we can about a facility or a building	1	result of staying at the hotels?
2	prior to any inspection we do. We're not there at the	2	A. I'm not qualified to give that opinion.
3	time of the loss. So that information is always	3	Q. Okay.
4	helpful.	4	A. I typically don't disqualify myself, but I'm not a
5	Q. My	5	medical doctor.
6	A. It's part it's part of a general experiment that I	6	Q. Fair enough. I do want to look at Exhibit 3 and just go
7	talked about earlier, you know.	7	through that briefly. Let me just ask you, were there
8	Q. My apologies if I asked this earlier. But do you know	8	any differences in your methodology of testing on the
9	how close the fire got to the hotels?	9	Days Inn as opposed to the Rocky Waters Motor Inn?
10	A. I believe it I believe there was some burn right	10	A. No.
11	across the creek, if I remember right.	11	Q. The in the Days Inn it appears to me that of all the
12	Q. Okay.	12	samples taken there were four that showed either more
13	A. Yeah.	13	soot than char or the same level of char and soot.
14	Q. Do you know anything about the soil composition in the	14	Whereas, in the Rocky Waters Motor Inn, there are only
15	vicinity of the hotels?	15	four with more soot than char or with the same level of
16	A. Do not.	16	char and soot. Do you have any explanation for that
17	Q. Do you know anything about the predominant forms of	17	difference?
18	plant life in the area that burned?	18	A. The only thing I can think of is it sits higher. I
19	A. No.	19	don't know if you've been to the site or not. But they
20	Q. You make a comment in your report that soot is still	20	sit this one sits at a higher elevation.
21	viable in the ambient air. What do you mean by viable?	21	Q. Which one? The Days Inn?
22	A. It's still there.	22	A. Days Inn, yeah.
23	Q. Any idea how many times the air in the attic of the	23	Q. Okay.
24	hotel has turned over since the fire?	24	A. Yeah. So so it is acclimated differently. So in
25	A. No.	25	terms of in terms of the exposure of that building,
	Dags 122	1	
	Page 123		Page 125
1	Q. Same question as to the walls.	1	Page 125
1 2	-	1 2	
	Q. Same question as to the walls.		based on the building code, it would be an exposure more
2	Q. Same question as to the walls.  A. No.	2	based on the building code, it would be an exposure more closer to an Exposure C because of the escarpment, which
2	Q. Same question as to the walls.  A. No.  Q. Tell me a little bit about Mr. Piero's training and	2	based on the building code, it would be an exposure more closer to an Exposure C because of the escarpment, which is the hill that it's next to. So the wind load would
2 3 4	Q. Same question as to the walls.  A. No.  Q. Tell me a little bit about Mr. Piero's training and background	2 3 4	based on the building code, it would be an exposure more closer to an Exposure C because of the escarpment, which is the hill that it's next to. So the wind load would be higher on any given day than the one that sits lower
2 3 4 5	Q. Same question as to the walls.  A. No.  Q. Tell me a little bit about Mr. Piero's training and background  A. Sure.	2 3 4 5	based on the building code, it would be an exposure more closer to an Exposure C because of the escarpment, which is the hill that it's next to. So the wind load would be higher on any given day than the one that sits lower and is more protected.
2 3 4 5 6	<ul> <li>Q. Same question as to the walls.</li> <li>A. No.</li> <li>Q. Tell me a little bit about Mr. Piero's training and background</li> <li>A. Sure.</li> <li>Q that would qualify him to collect samples on a</li> </ul>	2 3 4 5 6	based on the building code, it would be an exposure more closer to an Exposure C because of the escarpment, which is the hill that it's next to. So the wind load would be higher on any given day than the one that sits lower and is more protected.  Q. Did you ever do any analysis of average wind speed in
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	Page 126	Page 128
1	A. He doesn't give us a budget. None of our clients do.	1 ERRATA SHEET
2	They send us a file. We review it, and then we send out	2 Page/Ln Correction Reason
3	to them what we believe is necessary, with some options	3
4	to once we get to the field, to possibly do what's	4
5	called a change order, where we need to add some scope	5
6	based on what we're seeing if something changes. Not	6
7	everybody agrees to that. Some people say I don't want	7
8	to pay that, and they go they go elsewhere.	8
9	Q. Okay. Were there any differences as to your	9
10	recommendations for remediation between the Days Inn and	10
11	Rocky Waters Motor Inn?	11
12	A. No. They were very similar.	12
13	Q. Okay. Do you believe that all all of the wall	13
14	cavities at both of these hotels contain wildfire	14
15	debris?	15
16	MR. SCOTT: Object to the form.	16
17	A. To a limited degree, yes.	17
18	Q. (MR. DEVILLING) Okay. Whether a particular wall cavity	18
19	would have wildfire debris in it would depend on the	19
20	extent to which it's sealed from the air around the	20
21	cavity, correct?	21
22	A. Yes.	22
23	Q. Okay. And without doing some very destructive testing,	23
24	there would be no way to determine the degree to which	24
25	each wall cavity is isolated from the surrounding	25
	Page 127	Page 129
1	environment, correct?	I, Thomas J. Irmiter, have read this transcript, pages 1
1 2	environment, correct?  A. Correct.	
		1 I, Thomas J. Irmiter, have read this transcript, pages 1
2	A. Correct.	<ol> <li>I, Thomas J. Irmiter, have read this transcript, pages 1</li> <li>- 127, and acknowledge herein its accuracy except as</li> </ol>
2 3	A. Correct.  MR. DEVILLING: Okay. Those are all the	<ol> <li>I, Thomas J. Irmiter, have read this transcript, pages 1</li> <li>- 127, and acknowledge herein its accuracy except as noted on the errata sheet.</li> </ol>
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2 3 4 5 6 7	A. Correct.  MR. DEVILLING: Okay. Those are all the questions that I have.  MR. SCOTT: No questions. Thank you.  MR. DEVILLING: Thank you.  THE VIDEOGRAPHER: And we are going off the	I, Thomas J. Irmiter, have read this transcript, pages 1 - 127, and acknowledge herein its accuracy except as noted on the errata sheet.  Signature Signature
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4	CTATE OF MININGCOTA
1	STATE OF MINNESOTA
1 2 3 4	CERTIFICATE
3	COUNTY OF CARVER
4	I, Christine M. Clark, RPR, hereby certify
	that I reported the Videotape Deposition of Thomas J.
5	Irmiter on this 28th day of February, 2020, in
	Minneapolis, Minnesota, and that the witness was by me
6	first duly sworn to tell the truth and nothing but the
O	· · · · · · · · · · · · · · · · · · ·
_	truth concerning the matter in controversy aforesaid;
7	
	That I was then and there a notary public in and
8	for the County of Carver, State of Minnesota; that by
	virtue thereof I was duly authorized to
9	administer an oath;
10	That the foregoing transcript is a true and
	correct transcript of my stenographic notes in
11	said matter, transcribed under my direction and
1 1	control;
10	Control,
12	<del></del>
	That the cost of the original has been
13	charged to the party who noticed the deposition and
	that all parties who ordered copies have been
14	charged at the same rate for such copies;
15	That the reading and signing of the
	deposition was not waived;
16	45 p 5 3 3 3 4 4 5 4 5 4 5 4 5 4 5 4 5 5 6 5 6 5 6 5
1	That I am not related to any of the
17	parties hereto, nor interested in the outcome of the
1/	
10	action and have no contract with any parties,
18	attorneys or persons with an interest in the action
	that has a substantial tendency to affect my
19	impartiality;
20	WITNESS MY HAND AND SEAL this 3rd day of
	March 2020.
21	
22	
23	Christine M. Clark, RPR
23	·
24	Notary Public
24	
25	

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